

THE
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AND
JOURNAL
OF THE
MINERALOGICAL SOCIETY

(INSTITUTED FEBRUARY 3, 1876)

EDITED BY L. J. SPENCER, C.B.E., F.R.S.

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MINERALOGICAL SOCIETY

(Instituted February 3, 1876)

BYE-LAWS¹

The object of the Mineralogical Society of Great Britain and Ireland, with which the Crystallological Society was amalgamated on December 11, 1883, shall be to advance the knowledge of Mineralogy and also of Crystallography and Petrology.

The Society shall consist of Ordinary Members and Honorary Members.

ORDINARY MEMBERS

Every candidate for Ordinary Membership shall be proposed by Ordinary Members, one, at least, of whom shall have personal knowledge of the candidate.

Elections to Ordinary Membership shall be made by the Council, and shall be confirmed at the ensuing General Meeting by a majority consisting of three-fourths of the Members present and voting.

Ordinary Members shall pay an entrance fee of one guinea and an annual subscription of one guinea. They shall be entitled to compound for the annual subscription by a single payment of fifteen guineas, but Members who have paid their annual subscriptions for twenty years shall be entitled to compound for ten guineas.

Annual subscriptions shall be due on the first of January of each year, but Members elected after the first of October shall not be required to pay a subscription for the then current year.

No person elected an Ordinary Member of the Society shall be entitled to any of the privileges of Membership until he shall have paid his entrance fee and first annual subscription; and unless these are received within four calendar months of the date of his election, or within such further time as the Council may determine, the election of such person shall be void.

At the first Meeting of the Council in each calendar year the names of any Ordinary Member who is in default with his annual subscription for the preceding year shall be brought before the Council,

¹ Revised at the Anniversary Meeting of November 3, 1931.

and an intimation that this action has been taken shall be communicated to the Member in writing at his last known address. If at the first meeting in the next ensuing year the Member be still in default and the default be for the two preceding years the Council shall be empowered to erase his name from the list of Members.

HONORARY MEMBERS

9. Ten persons, non-resident in Great Britain or Ireland, may be elected Honorary Members. They shall pay neither entrance fee nor annual subscription. They shall not be entitled to vote on any question relating to the management or business of the Society, nor to serve on the Council of the Society, nor to fill any Office in the Society, but subject to these restrictions shall be entitled to every other privilege accorded to Ordinary Members.

10. Every candidate for Honorary Membership shall be proposed by two Members of the Council, and the election shall be by the Council, and shall be confirmed at the ensuing General Meeting by a majority consisting of three-fourths of the Members present and voting.

COUNCIL

11. The Society shall be governed by a Council, consisting of a President, two Vice-Presidents, a General Secretary, a Foreign Secretary, a Treasurer, an Editor of the Journal, the Trustees of the Society, and twelve Ordinary Members.

12. All Members of the Society who have served the office of President shall be Life-Members of the Council.

13. The Council shall be elected annually at the Anniversary Meeting.

14. Four Ordinary Members of Council shall retire annually, and shall not be eligible for re-election until the next Anniversary Meeting.

15. The Council shall prepare a list of Members nominated for election as Officers and Ordinary Members of Council.

16. The election of Council shall be effected by the agency of voting papers containing the list nominated by the Council. They shall be sent by the General Secretary, at least four weeks before the Anniversary Meeting, to every Ordinary Member of the Society, and every such Member shall be entitled to substitute the names of any other Ordinary Members of the Society for those on the list.

17. The voting papers shall be returned by the Members to the General Secretary, and shall be examined at the Anniversary Meeting.

two Scrutineers appointed by the Chairman, who shall on their report declare the result of the election. The voting papers need not be signed.

18. The Council shall have power to appoint Officers, and to co-opt Ordinary Members of Council, to fill vacancies in the Council caused by death or resignation during the interval between two Anniversary Meetings.

19. Meetings of the Council shall be summoned by the General Secretary at the order of the President or of not fewer than three Members of the Council; at such meetings six shall be a quorum, of whom one shall be either the President, a Vice-President, the Treasurer, or the General Secretary.

20. A Report of Council on the work and progress of the Society shall be submitted to each Anniversary Meeting.

PROPERTY AND TRUSTEES

21. Two or more Trustees shall be appointed by the Council from amongst the Members of the Society, and the invested property of the Society shall stand in their names.

22. The Council may from time to time make such purchases of books or other movable effects as they may consider to be required for the furtherance of the objects of the Society and the conduct of its business. They may also dispose of such effects by sale, if not required, provided that no instruction to sell at any one time effects the total value of which exceeds the sum of fifty pounds shall be valid unless endorsed by a resolution passed at a General Meeting of the Society.

23. The Council may authorize the investment of money and the mode of investments. A copy of a resolution of the Council authorizing the sale or purchase of investments, certified by the Chairman of the Meeting at which it was passed, shall be sufficient authority to the Trustees to give effect to such resolution.

24. Composition fees shall be treated as Capital, and all moneys so received and all other moneys the investment of which has been authorized by the Council shall be invested in such stock or security as the Council may select from amongst the stocks and securities authorized by Law for the investment of trust moneys.

25. No Member of the Society is or shall be entitled to any distinct or separate share in the estate, revenue, or effects of the Society, and

the Society shall not and may not make any dividend, gift, division, or bonus in money unto or between any of its Members, provided that nothing herein shall prevent the payment in good faith of reasonable and proper remuneration, or of an honorarium in lieu thereof, to any Member of the Society, in return for services rendered to the Society, nor prevent the distribution of copies of the publications of the Society gratis among the Members of the Society.

26. In the event of a dissolution of the Society its property and effects (whether funded or otherwise) shall be disposed of by gift to such other Societies or Institutions or in such other manner as may be decided by the vote of a majority of at least three-fourths of those present and voting at a General Meeting of the Society summoned with notice of the proposed disposal, provided that no individual Members shall benefit thereby, and that such gift or other disposal shall be for the benefit of Mineralogy or its allied Sciences.

MEETINGS

27. General Meetings of the Society shall be summoned from time to time as may be deemed necessary by the Council, or on the requisition of any ten Members of the Society. One of these meetings in each year shall be termed the Anniversary Meeting. Any meeting of the Society summoned for the purpose of considering special matters relating to the business of the Society shall be termed a Special General Meeting, and the summons thereto shall contain the resolutions or other matter to be considered, and shall be issued to the Members not less than four weeks before the date fixed for the Meeting.

JOURNAL

28. The Numbers of the *Mineralogical Magazine and Journal of the Society* shall be issued at such intervals as the Council shall determine, and shall be sent, postage paid, to every Member of the Society, other than annual subscribers who are in default with their annual subscriptions for the preceding calendar year.

AUDITORS AND BALANCE SHEET

29. One Member of the Council and one Ordinary Member of the Society, who is not a Member of the Council, shall be appointed annually by the Council to audit the accounts of the Society.

30. No auditor shall serve for more than three years in succession.

31. The audited Balance Sheet, after submission to the Council, shall be published in the Journal of the Society as early as possible every year.

EXPULSION OF MEMBERS

32. A majority consisting of three-fourths of the whole Council shall have power to expel a Member from the Society, but a Member who has been expelled shall have a right of appeal to the Society. Notice of such appeal to the Society shall be sent by such Member to the General Secretary within four weeks of the expulsion, and the appeal shall be considered by the Society at the next Anniversary Meeting or at a Special General Meeting; a majority of the votes recorded at such Meeting sufficing to confirm or annul the decision of the Council.

ALTERATION OF THE BYE-LAWS

33. The Bye-laws may be altered only at an Anniversary Meeting or at a Special General Meeting duly summoned for the purpose of considering the proposed alterations, and only by a majority consisting of three-fourths of the Members present and voting. Notice of changes proposed to be made in the Bye-laws shall be communicated to the General Secretary to every Ordinary Member of the Society at least four weeks before the Anniversary Meeting or the Special General Meeting summoned for the purpose of their consideration.

OBLIGATION BOOK

34. Ordinary Members, by payment of their entrance fee, signify their acceptance of any Bye-laws approved by the Society; and every Member of the Society shall sign an Obligation Book.

INTERPRETATION

35. In the interpretation of the Bye-laws words in the masculine gender only shall include the feminine gender also.

LIST OF MEMBERS

(February, 1938)

HONORARY MEMBERS

r of
tion.

- 5 BRÖGGER, Waldemar Christofer. *The University, Oslo, Norway.*
- 9 CESÀRO, Giuseppe. Emeritus Professor of Mineralogy in the
University of Liège. *1 Place Cockerill, Liège, Belgium.*
- 4 FERSMAN, Aleksandr Evgenievich. Director of the *Lomonosov
Institute, Academy of Sciences, Moscow, Russia.*
- 3 GOLDSCHMIDT, Victor Moritz. Professor of Mineralogy in the
University of Oslo. *Geologisk Museum, Trondhjemsveien 23,
Oslo, Norway.*
- 0 LACROIX, Antoine François Alfred. Emeritus Professor of
Mineralogy in the Muséum National d'Histoire Naturelle.
61 Rue de Buffon, Paris V, France.
- 5 NIGGLI, Paul. Professor of Mineralogy in the Technical High
School of Zürich. *Mineralogical Institute, Sonneggstrasse 5,
Zürich 6, Switzerland.*
- 7 PALACHE, Charles. Professor of Mineralogy in *Harvard Uni-
versity, Cambridge, Massachusetts, U.S.A.*
- 7 WALKER, Thomas Leonard. Emeritus Professor of Mineralogy
in the University of Toronto, and formerly Director of the
Royal Ontario Museum of Mineralogy. *East 20 Avondale
Road, Toronto, Canada.*

ORDINARY MEMBERS ¹

A Annual Subscribers.

L Life-Members.

C Belonged to the Crystallogical Society at the time of the amalgamation of the two Societies, December 11, 1883.

Year of
Election.

- A 1931 ADAMS, Leason Herberling, B.S. *Geophysical Laboratory, 2801 Upton Street, Washington, D.C., U.S.A.*
- A 1933 ALDERMAN, Arthur Richard, Ph.D., M.Sc., F.G.S. *Geology Dept., The University, Adelaide, Australia.*
- A 1931 AMINOFF, Gregori, Professor. *Mineralogiska Avdelning, Naturhistoriska Riksmuseet, Stockholm 50, Sweden.*
- A 1928 ANDERSON, Basil William, B.Sc., F.C.S. *Ladylane, Lodge Hill, Ditchling, Sussex.*
- L 1926 ANDREW, Gerald, M.Sc., F.G.S. *Geology Dept., Egyptian University, Cairo, Egypt; and 8 Calland Avenue, Hyde, Cheshire.*
- A 1922 ARKELL, Daniel John, B.Sc. *St. Edward's College, Cottonera, Malta.*
- L 1900 ASHCROFT, Frederick Noel, M.A., F.G.S., F.C.S., F.R.G.S. *1 Egerton Gardens, South Kensington, London, S.W. 3.*
- A 1936 ASPLAND, Vivien Lindsey, M.C., A.R.S.M., M.I.M.M. *'White-wood', Windsor Road, Gerrard's Cross, Bucks.*
- A 1935 BAILEY, Edward Battersby, M.C.; M.A., D.Sc., F.R.S. *Director of the Geological Survey of Great Britain. Geological Survey and Museum, Exhibition Road, South Kensington, London, S.W. 7.*
- A 1922 BALSILLIE, David, B.Sc., F.R.S.E., F.G.S. *Dept. of Geology, Royal Scottish Museum, Edinburgh.*
- A 1932 BANDY, Mark Chance, A.B., M.A., E.M. *c/o Patino Mines & Enterprises, Llallagua, Bolivia.*
- A 1927 BANNISTER, Frederick Allan, M.A. *Mineral Dept., British Museum of Natural History, South Kensington, London S.W. 7; and 34 Monahan Avenue, Purley, Surrey.*
- A 1936 BARBER, Cecil Thomas, M.Sc., Ph.D. *c/o Dept. of Mineralogy and Petrology, Downing Street, Cambridge.*
- A 1928 BEARD, Edward Harold, B.Sc. *Mineral Resources Dept. Imperial Institute, South Kensington, London, S.W. 7.*

¹ Corrections for this List should be sent to the General Secretary.

- Year of
Election.
- 1922 BELAIEW, Nicholas Timothy, Colonel, C.B., M.I.M.E.
1 Rond-Point Bugeaud, Paris XVI, France.
- 1888 BEMROSE, Henry Howe, J.P., M.A., Sc.D., F.G.S. '*Ash Tree House*', *Osmaston Road, Derby.*
- 1934 BENSON, William Noel, B.A., D.Sc., F.G.S. Professor of Geology, *University of Otago, Dunedin, New Zealand.*
- 1933 BERMAN, Harry, Ph.D. *Mineralogical Museum, Harvard University, Cambridge, Massachusetts, U.S.A.*
- 1929 BERNAL, John Desmond, M.A., F.R.S. Professor of Physics, *Birkbeck College, Bream's Buildings, London, E.C. 4.*
- 1906 BLAKE, George Stanfield, B.Sc., A.R.S.M., F.G.S. Geological Survey of Palestine. *P.O. Box 649, Jerusalem, Palestine.*
- 1929 BLIGHT, Percy. *Mina dos Lagares, Santam, Beira Alta, Portugal.*
- 1923 BLUMENTHAL, Maurice. *558 Quincy Street, Brooklyn, New York, U.S.A.*
- 1937 BLYTH, Francis George Henry, M.Sc., B.Sc., A.C.G.I., D.I.C. *9 Kohinoor Avenue, Bushey, Herts.*
- 1922 BOSWELL, Percy George Hamnall, O.B.E., D.Sc., A.R.C.S., F.R.S. Professor of Geology, *Imperial College of Science and Technology, South Kensington, London, S.W. 7.*
- 1931 BOTTLEY, Edward Percival. *30 Old Church Street, Chelsea, London, S.W. 3.*
- 1927 BOUBÉE, Nérée, Licencié-ès-Sciences. *3 Place St. André-des-Arts, Paris VI, France.*
- 1927 BOWEN, Norman Levi, M.A., B.Sc., Ph.D. Professor of Geology, *University of Chicago, Chicago, Illinois, U.S.A.*
- 1897 BOWMAN, Herbert Lister, M.A., D.Sc., F.G.S., F.C.S. Professor of Mineralogy in the University of Oxford. *Dept. of Mineralogy, University Museum, Oxford.*
- 1923 BRADY, Oscar Lisle, B.A., D.Sc., D.I.C., F.I.C., F.C.S. Reader in Organic Chemistry, University of London, University College. *24 Arthur Court, Queen's Road, London, W. 2.*

- Year of
Election.
- A 1923 BRAGG, Sir William Henry, O.M., K.B.E., M.A., D.Sc., LL.D., F.R.S. Director of the Royal Institution. 21 *Albemarle Street, London, W. 1.*
- A 1920 BRAGG, William Lawrence, O.B.E., M.A., D.Sc., F.R.S. Director of the *National Physical Laboratory, Teddington Middlesex.*
- A 1919 BRAMMALL, Alfred, Ph.D., D.Sc., D.I.C., F.G.S., A.I.M.M. Assistant Professor in Petrology, *Dept. of Geology, Imperial College of Science and Technology, South Kensington, London, S.W. 7.*
- A 1923 BUCKLEY, Harold Eugene, D.Sc., F.C.S. Lecturer in Crystallography, University of Manchester. '*Bradda*', 100 *Hazellhurst Road, Worsley, near Manchester, Lancashire.*
- A 1921 BULL, Alfred Joseph, M.Sc., F.Inst.P., F.G.S. *L.C.C. School of Photo-engraving, 6 Bolt Court, Fleet Street, London, E.C. 4.*
- A 1926 BURRI, Conrad Robert, Ph.D. Professor in the *Mineralogical Institute, Sonneggstrasse 5, Zürich 6, Switzerland.*
- A 1935 BURTON, William. 6 *Albemarle Mansions, Holloway Road, London, N. 7.*
- A 1919 BUTTGEBACH, Henri Jean François. Professor of Crystallography and Mineralogy in the University of Liège. 7 *Avenue Emile Digneffe, Liège, Belgium.*
- A 1923 CAHN, Lazard. *P.O. Box 733, Colorado Springs, Colorado, U.S.A.*
- A 1924 CAMPBELL, Robert, M.A., D.Sc., F.R.S.E., F.G.S. Lecturer in Petrology, University of Edinburgh. '*Maryton*', *Woodhall Road, Colinton, Edinburgh.*
- A 1937 CASSIRER, Friedrich Wilhelm. *Ovencika 7, Praha VII, Czechoslovakia.*
- A 1935 CLARINGBULL, Gordon Frank, B.Sc., Ph.D., F.G.S. *Mineral Dept., British Museum of Natural History, South Kensington, London, S.W. 7.*
- A 1928 CLARKE, Edward de Courcy, M.A., A.I.M.M. *Dept. of Geology, University of Western Australia, Perth, Western Australia.*

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ection.

- 1927 CLEGG, Edward Leslie Gilbert, B.Sc. Assistant Superintendent, *Geological Survey of India*, 27 Chowringhee Road, Calcutta, India.
- 1931 COCKBURN, Alexander Murray, B.Sc., Ph.D. *Grant Institute of Geology*, King's Buildings, West Mains Road, Edinburgh.
- 1927 COKE, Basil Elmsley, Lieut.-Colonel R.E. (retired), O.B.E., M.A., F.G.S. 'Littlehill', Harpsden, Henley-on-Thames, Oxfordshire.
- 1923 COMBE, Arthur Delmar, F.G.S. *Geological Survey*, Entebbe, Uganda, East Africa.
- 1900 COOMARASWAMY, Ananda K., D.Sc., F.L.S., F.G.S., M.R.A.S. Keeper of Indian Art, *Museum of Fine Arts*, Boston, Massachusetts, U.S.A.
- 1935 COURTAULD, Mrs. Virginia. *Eltham Hall*, London, S.E. 9.
- 1924 COUSSMAKER, Arthur Blakeney, M.C., F.G.S., A.I.M.M. 78 Hatton Garden, London, E.C. 1.
- 1899 CULLIS, Charles Gilbert, D.Sc., F.G.S., M.I.M.M. Emeritus Professor of Economic Mineralogy, *Imperial College of Science and Technology*, South Kensington, London, S.W. 7; and 81 Murray Road, Wimbledon, London, S.W. 19.
- 1935 DAVIDSON, Charles Findlay, B.Sc., F.R.S.E., F.G.S. *Geological Survey and Museum*, Exhibition Road, South Kensington, London, S.W. 7.
- 1926 DAVIES, George MacDonald, M.Sc., F.G.S. Reader in Geology, Birkbeck College, London. 63 Beechwood Road, Sanderstead, Surrey.
- 1936 DAVISON, Ernest Henry, B.Sc., F.G.S. *Camborne School of Mines*; and 'Glanmire', Bassett Street, Camborne, Cornwall.
- 1898 DE CASTRO, John Paul, M.A., F.C.S., F.I.C. *Dorchester Road*, Hoot, Basingstoke, Hants.
- 1936 DEER, William Alexander, M.Sc., Ph.D. *Geology Dept.*, University of Manchester; and 4 Brownley Road, Sharston, Northenden, Manchester.
- 1937 DENNIS, Frederick William, F.G.S. *Tower House*, Ricardo Street, Longton, Staffordshire.

- Year of
Election.
- A 1937 DIXEY, Frank, O.B.E., D.Sc., F.G.S. Director of the Geological Survey of Nyasaland, Zomba, Nyasaland *British Central Africa*.
- A 1933 DOLLAR, Archibald Thomas John, B.Sc., Ph.D., F.G.S. *Emmanuel College, Cambridge*; and 72 *Maida Vale London, W. 9*.
- A 1925 DOUBLE, Ivan Sidney, M.Sc., F.G.S. *Geological Dept., The University, Liverpool*.
- L 1928 DOUGLAS, George Vibert, M.C., M.Sc., F.G.S. Professor of Geology, *Dalhousie University, Halifax, Nova Scotia*.
- A 1937 DREVER, Harold Irving, B.Sc. *Dept. of Geology, The University, St. Andrews, Fife*; and 13 *Wardie Road, Edinburgh*.
- L 1910 DRUGMAN, Julien Léon Eugène, Ph.D., M.Sc. 33 *Rue Edmond Picard, Uccle, Brabant, Belgium*.
- A 1938 DUNHAM, Kingsley Charles, B.Sc., Ph.D., S.D., F.G.S. *Geological Survey and Museum, Exhibition Road, South Kensington, London, S.W. 7*.
- L 1936 DUNN, John Alexander, D.Sc., F.G.S. *Geological Survey of India, 27 Chowringhee Road, Calcutta, India*.
- A 1937 EASTWOOD, Tom, A.R.C.S., F.G.S. *Geological Survey and Museum, Exhibition Road, South Kensington, London S.W. 7*.
- L 1926 ECKERMANN, Harry von, Ph.D. Lecturer in Mineralogy and Petrology, University of Stockholm. *Edeby pr. Sparreholm, Sweden*.
- L 1918 EDGE, Arthur Broughton, M.B.E., A.R.S.M., A.R.C.S., B.Sc., F.G.S., F.C.S. *c/o Dept. of Geology, Imperial College of Science and Technology, South Kensington, London, S.W. 7*.
- A 1925 ELLSWORTH, Hardy Vincent, M.A., Ph.D. *Geological Survey of Canada, Ottawa, Canada*.
- L 1926 FEARNSIDES, William George, M.A., F.R.S. Professor of Geology, University of Sheffield. 11 *Ranmoor Crescent Sheffield*.
- A 1915 FERMOR, Sir Lewis Leigh, Kt., O.B.E., A.R.S.M., D.Sc., F.R.S. *c/o Lloyds Bank, 6 Pall Mall, London, S.W. 1*.

- Year of
election.
- 1935 FLEET, William Frederick, M.Sc., Ph.D., F.G.S. *Chelsea Polytechnic, London, S.W. 3*; and 'Branscombe', *Briton Hill Road, Sanderstead, Surrey*.
- 1895 FLETCHER, Rev. Mark, M.A., M.Sc., F.G.S. Lecturer in Mineralogy in King's College, University of Durham, Newcastle-on-Tyne. *Long Benton Vicarage, Forest Hall, Northumberland*.
- 1902 FLETT, Sir John Smith, K.B.E., M.A., LL.D., D.Sc., F.R.S. *c/o Geological Survey and Museum, Exhibition Road, South Kensington, London, S.W. 7*.
- 1926 FORD, Hugh Alexander, H.B.M. Consul-General, *The British Consulate General, Boston, Massachusetts, U.S.A.*
- 1937 GAME, Philip Malcolm, B.Sc., F.R.G.S. *Mineral Dept., British Museum of Natural History, South Kensington, London, S.W. 7*.
- 1923 GARNETT, Cecil Stevenson, F.C.S., F.G.S. 6 *The Strand, Derby*.
- 1937 GEAR, Donald James. 20 *Clarendon Road, Hornsey, London, N. 8*.
- 1933 GIBBS, Agnes, Lady, B.Sc., F.G.S., F.R.G.S. *Shamley Green, Guildford, Surrey*.
- 1905 GOODCHILD, Wilbert, M.B., Ch.B. *Blencathra Sanatorium, Threlkeld, Penrith, Cumberland*.
- 1922 GORDON, Hugh Septimus, M.I.M.M., F.G.S. 'Harting', *Norton Road, Plumstead, Cape Town, South Africa*.
- 1923 GORDON, Samuel George. *Academy of Natural Sciences, Logan Square, Philadelphia, Pennsylvania, U.S.A.*
- 1923 GORDON, William Thomas, M.A., D.Sc., F.R.S.E., F.G.S. Professor of Geology, *King's College, Strand, London, W.C. 2*.
- 1903 GRABHAM, George Walter, O.B.E., M.A., F.G.S. Formerly Geologist to the Sudan Government. *P.O. Box 178, Khartoum, Sudan*.
- 1913 GRAHAM, Richard Percival Devereux, B.A., D.Sc., F.R.S.C. Assistant Professor of Mineralogy, *McGill University, Montreal, Canada*.

- Year of
Election.
- A 1924 GRANTHAM, Donald Robert, Ph.D., A.R.S.M., F.G.S. *Geological Survey, Lands and Mines Dept., Dodoma, Tanganyika Territory, East Africa; and 'Carrickfergus', Deepdene Avenue, Dorking, Surrey.*
- A 1929 GRAY, George Wynter, A.R.S.M. *3 Lombard Street, London E.C. 3.*
- A 1931 GROVES, Arthur William, D.Sc., Ph.D., M.Sc., D.I.C., F.G.S. *Mineral Resources Dept., Imperial Institute, South Kensington, London, S.W. 7; and 36 Albert Mansions, Albert Bridge Road, Battersea Park, London, S.W. 11.*
- A 1933 HADFIELD, Sir Robert Abbott, Bart., D.Sc., F.R.S. *22 Carlton House Terrace, London, S.W. 1.*
- A 1930 HALL, Thomas Clifford Fitzwilliam, M.I.M.M. *Royal Empire Society, Northumberland Avenue, London, W.C. 2; and 'Trevu', Camborne, Cornwall.*
- A 1912 HALLIMOND, Arthur Francis, M.A., Sc.D., F.G.S. *Assistant Curator, Geological Survey and Museum, Exhibition Road, South Kensington, London, S.W. 7.*
- A 1885 HARKER, Alfred, M.A., LL.D., F.R.S. *Emeritus University Reader in Petrology, St. John's College, Cambridge.*
- L 1937 HARRISON, John Vernon, D.Sc., F.R.S.E., F.G.S. *Lecturer in Geology, University Museum, Oxford; and 34 Rowallan Gardens, Glasgow, W. 1.*
- A 1931 HART, Robert, B.Sc., Ph.D. *Macaulay Institute for Soil Research, Craigiebuckler, Aberdeen.*
- L 1900 HARTLEY, Sir Harold Brewer, Kt., C.B.E., M.C., M.A., F.R.S. *14 North Court, Wood Street, Westminster, London S.W. 1.*
- A 1917 HARWOOD, Henry Francis, M.Sc., Ph.D., F.I.C., F.G.S. *Assistant Professor in Chemistry, Imperial College of Science and Technology, South Kensington, London, S.W. 7.*
- A 1921 HAWKES, Leonard, D.Sc., F.G.S. *Reader in Geology, University of London. Bedford College, Regent's Park, London, N.W. 1.*
- A 1928 HEIDE, Fritz, D.Ph. *Schillerstrasse 12, Jena, Germany.*
- A 1936 HENRY, Norman Fordyce McKerron, B.Sc., M.A. *St. John's College, Cambridge.*

- Year of
election.
- 1929 HEY, Max Hutchinson, M.A., D.Sc., F.C.S. *Mineral Dept., British Museum of Natural History, South Kensington, London, S.W. 7.*
- 1907 HILTON, Harold, M.A., D.Sc. Professor of Mathematics in the University of London. *Bedford College, Regent's Park, London, N.W. 1.*
- 1927 HITCHEN, Charles Stansfield, B.Sc., Ph.D., A.R.C.S., D.I.C., F.G.S. *Mining and Geological Dept., P.O. Box 339, Nairobi, Kenya Colony.*
- 1928 HODGE, Matthew Burnop, M.Sc., Ph.D. *Bankfield Museum, Halifax, Yorkshire.*
- 1896 HOLLAND, Sir Thomas Henry, K.C.S.I., K.C.I.E., A.R.C.S., D.Sc., LL.D., F.R.S. Principal of The University, Edinburgh. *Blackford Brae, Edinburgh.*
- 1929 HOLLINGWORTH, Sidney Ewart, M.A., D.Sc., F.G.S. *Geological Survey and Museum, Exhibition Road, South Kensington, London, S.W. 7; and 'Whitecot', Addington Road, West Wickham, Kent.*
- 1914 HOLMES, Arthur, D.Sc., D.I.C., A.R.C.S., F.G.S. Professor of Geology in the University of Durham. *Science Laboratories, South Road, Durham.*
- 1931 HONESS, Arthur Pharaoh. Professor of Mineralogy, *Pennsylvania State College, State College, Pennsylvania, U.S.A.*
- 1925 HORN, Aubrey Evelyn. *Naraguta Tin Mines, Ltd., Post Office, Jos, Plateau Province, Northern Nigeria.*
- 1902 HOWE, John Allen, O.B.E., B.Sc., F.G.S. 21 *Richmond Bridge Mansions, Twickenham, Middlesex.*
- 1928 HOWLING, Gerald Edward, B.Sc. *Mineral Resources Dept., Imperial Institute, South Kensington, London, S.W. 7.*
- 1935 HUGILL, William, M.Met. *Langham House, Fields Road, Alsager, Stoke-on-Trent, Staffordshire.*
- 1937 HUTTENLOCHER, Heinrich Ferdinand, Ph.D. Professor of Mineralogy and Petrography in the University of Berne, *Gümligen, Berne, Switzerland.*
- 1936 HUTTON, Colin Osborne, M.Sc., F.G.S. *Dept. of Mineralogy and Petrology, Downing Street, Cambridge.*

- | | Year of
Election. | |
|---|----------------------|---|
| A | 1936 | ILLING, Vincent Charles, M.A., M.I.M.M., F.G.S. Assistant Professor of Geology (Oil Technology), <i>Imperial College of Science and Technology, South Kensington, London, S.W. 7</i> ; and 'Links Corner', <i>Ashtead, Surrey</i> . |
| A | 1931 | ITO, Tei-ichi. Assistant Professor of Mineralogy, <i>Mineralogical Institute, Imperial University, Tokyo, Japan</i> . |
| A | 1935 | JACKSON, Henry Stanley Lawies, B.A. 33 <i>Pont Street, London, S.W. 1</i> . |
| A | 1923 | JARDINE, Irvine George, M.Sc., F.G.S. 27 <i>Cecil Road, Upton Manor, London, E. 13</i> . |
| A | 1925 | JOHNSTON, Robert Angus Alister, F.R.S.C. 112 <i>Old Forest Hill Road, Toronto 10, Canada</i> . |
| L | 1905 | JONES, Bernard Mouat, D.S.O., M.A., F.C.S. Principal of <i>The College of Technology, Manchester</i> . |
| L | 1908 | JONES, Owen Thomas, M.A., D.Sc., F.R.S. Woodwardian Professor of Geology, <i>Sedgwick Museum, Cambridge</i> . |
| A | 1930 | JONES, William Richard, D.Sc., M.I.M.M., F.G.S. Reader in Mining Geology, <i>Imperial College of Science and Technology, South Kensington, London, S.W. 7</i> . |
| A | 1936 | JOPLIN, Germaine Anne, B.Sc., Ph.D. <i>Dept. of Geology, University of Sydney, New South Wales</i> . |
| A | 1929 | KENNEDY, William Quarrier, D.Sc., Ph.D., F.G.S. Geological Survey of Great Britain (Scottish Office), 'Southpark', 19 <i>Grange Terrace, Edinburgh</i> . |
| A | 1936 | KNIGHT, Bernard Howard, D.Sc., Ph.D., A.M.I.C.E., F.G.S. 18 <i>Glenross, Belsize Road, London, N.W. 6</i> . |
| A | 1930 | KÔZU, Shukusuké, D.Sc. Professor of Mineralogy, <i>Mineralogical Institute, Tohoku Imperial University, Sendai, Japan</i> . |
| A | 1926 | KREUTZ, Stefan, Ph.D. Professor of Mineralogy and Crystallography in the University of Kraków. <i>Collegium Minus Gołębia 11, Kraków, Poland</i> . |
| L | 1926 | KRISHNAN, Maharajapuram Sitaram, M.A., Ph.D., A.R.C.S. D.I.C. Assistant Superintendent, <i>Geological Survey of India, 27 Chowringhee Road, Calcutta, India</i> . |
| A | 1922 | LAKE, Harry William, Colonel, C.M.G., M.I.M.M. 83 <i>Pal Mall, London, S.W. 1</i> . |

- Year of
election.
- 1923 LARSEN, Esper Signius, Ph.D. Professor of Petrology,
Harvard University, Cambridge, Massachusetts, U.S.A.
- 1923 LEECH, John George Chambré, A.R.S.M., F.G.S. 26 *Roedean
Crescent, Roehampton, London, S.W.* 15.
- 1929 LIGHTFOOT, Ben, M.C., M.A., F.G.S. Director of the Geo-
logical Survey, *P.O. Box 366, Salisbury, Southern Rhodesia.*
- 1879 LOUIS, Henry, M.A., D.Sc., A.R.S.M., F.G.S. Emeritus
Professor of Mining in King's College, University of Dur-
ham. 4 *Osborn Terrace, Jesmond, Newcastle-on-Tyne.*
- 1914 MACGREGOR, Alexander Miers, M.A., F.G.S. Geological
Survey, *P.O. Box 366, Salisbury, Southern Rhodesia.*
- 1929 MACGREGOR, Archibald Gordon, M.C., B.Sc., F.R.S.E.,
F.G.S. Geological Survey of Great Britain (Scottish
Office), 'Southpark', 19 *Grange Terrace, Edinburgh.*
- 1935 MACGREGOR, Malcolm, Ph.D., M.Sc., D.I.C., F.G.S. 6 *Hocroft
Road, London, N.W.* 2.
- 1929 MACGREGOR, Murray, M.A., D.Sc., F.R.S.E. Geological
Survey of Great Britain (Scottish Office), 'Southpark',
19 *Grange Terrace, Edinburgh.*
- 1908 McLINTOCK, William Francis Porter, D.Sc., F.R.S.E., F.G.S.
Deputy Director, *Geological Survey and Museum, Exhibi-
tion Road, South Kensington, London, S.W.* 7.
- 1921 McROBERT, Rachel Workman, Lady, B.Sc., F.G.S. 'Doun-
side', *Tarland, Aboyne, Aberdeenshire.*
- 1938 MARSHALL, Charles Edward, B.Sc., Ph.D., F.G.S. *Geology
Dept., University of Birmingham, Edgbaston, Birmingham.*
- 1925 MARSHALL, Patrick, M.A., D.Sc., F.G.S. 'Hautere', *Bellevue
Road, Lower Hutt, Wellington, New Zealand.*
- 1927 MATHEWS, Charles William, F.G.S. 14 *Hatton Garden,
London, E.C.* 1.
- 1930 MAURITZ, Béla. Professor of Mineralogy and Petrology in
the University of Budapest, *Muzeum-Körút 4, Budapest
VIII, Hungary.*
- 1929 MAWSON, Sir Douglas, Kt., O.B.E., D.Sc., B.E., F.R.S.
Professor of Geology and Mineralogy, *University of
Adelaide, South Australia.*

- | | Year of
Election. | |
|---|----------------------|--|
| L | 1919 | MELMORE, Sidney, B.Sc., F.G.S. ' <i>Winkinghurst</i> ', Carr Lane Acomb, York. |
| L | C | MIERS, Sir Henry Alexander, Kt., M.A., D.Sc., LL.D. D.C.L., F.R.S. Honorary Professor of Crystallography in the University of Manchester. 18 <i>Aberdare Gardens West Hampstead, London, N.W.</i> 6. |
| A | 1937 | MONTGOMERY, Arthur. 277 <i>Park Avenue, New York City U.S.A.</i> |
| A | 1912 | MORGAN, Arthur Henry, A.M.I.C.E., M.I.M.M. <i>Ruby Mines Mogok, Upper Burma.</i> |
| L | 1922 | MOUNTAIN, Edgar Donald, M.A. Professor of Geology <i>Rhodes University College, Grahamstown, South Africa.</i> |
| A | 1932 | MOURANT, Arthur Ernest, M.A., D.Phil. ' <i>Maison de Haut</i> ' <i>Longueville, St. Saviour, Jersey, Channel Islands.</i> |
| A | 1924 | MURRAY-HUGHES, Robert, F.G.S. <i>Royal Societies Club 63 St. James's Street, London, S.W.</i> 1. |
| A | 1933 | NOCKOLDS, Stephen Robert, B.Sc., Ph.D., F.G.S. <i>Dept. of Mineralogy and Petrology, Downing Street, Cambridge.</i> |
| A | 1927 | OGURA, Tsutoma, Professor of Geology, <i>Ryojun College of Engineering, Port Arthur, Manchuria.</i> |
| L | 1920 | OHASHI, Ryōichi. Professor of Geology and Mineralogy <i>Akita Mining College, Akita, Japan.</i> |
| A | 1935 | PAIN, Arthur Charles Davv. <i>Ryll Court, Exmouth, Devon.</i> |
| A | 1922 | PARKER, Robert Luling, Ph.D. Professor in the <i>Mineralogical Institute, Sonneggstrasse 5, Zürich 6, Switzerland.</i> |
| A | 1915 | PARSONS, Arthur Leonard. Assistant Professor of Mineralogy, <i>University of Toronto, Canada</i> |
| A | 1938 | PAYNE, Cecil James, B.Sc. 106 <i>Elgin Crescent, London, W</i> 11 |
| A | 1936 | PEACOCK, Martin Alfred, M.A., Ph.D., D.Sc. Associate Professor of Mineralogy and Petrography, <i>University of Toronto, Canada.</i> |
| A | 1937 | PENROSE, George. <i>Royal Institution of Cornwall, The Museum Truro, Cornwall.</i> |
| A | 1923 | PHEMISTER, James, M.A., D.Sc., F.R.S.E., F.G.S. <i>Geological Survey and Museum, Exhibition Road, South Kensington London, S.W.</i> 7. |

- ear of
lection.
- 1926 PHEMISTER, Thomas Crawford, Sc.M., Ph.D., D.Sc., F.G.S.
Professor of Geology and Mineralogy, *Marischal College,
University of Aberdeen.*
- 1926 PHILLIPS, Frank Coles, M.A., Ph.D., F.G.S. University
Lecturer in Petrology, *Corpus Christi College, Cambridge.*
- 1899 POLLARD, William, M.A., D.Sc., F.G.S., F.C.S. 'Whitmore',
Chittlehamholt, Umberleigh, North Devon.
- 1891 POPE, Sir William Jackson, K.B.E., M.A., M.Sc., D.Sc.,
LL.D., F.R.S. Professor of Chemistry in the University
of Cambridge. 'Holmleigh', *West Road, Cambridge.*
- 1910 PORTER, Miss Mary Winearls, D.Sc. 6 *Tackley Place,
Oxford.*
- 1930 POWELL, Herbert Marcus, B.A. *Dept. of Mineralogy, Univer-
sity Museum, Oxford.*
- 1922 PUCKLE, Geoffrey Montagu. 'The Oaks', *Cooper's Hill,
Eversley, Hampshire.*
- 1908 RAISIN, Miss Catherine Alice, D.Sc., F.L.S., F.G.S. 10A *Wol-
verton Gardens, Ealing Common, London, W. 5.*
- 1903 RASTALL, Robert Heron, M.A., Sc.D., F.G.S., M.I.M.M.
Christ's College, Cambridge.
- 1933 RAWLINS, Francis Ian Gregory, M.Sc. 41 *Rossmore Court,
Park Road, London, N.W. 1.*
- 1923 READ, Herbert Harold, D.Sc., A.R.C.S., F.G.S. Professor of
Geology, *The University, Liverpool.*
- 1932 REYNOLDS, Miss Doris Livesey, D.Sc., F.G.S. *Science
Laboratories, South Road, Durham.*
- 1915 RICHARDSON, William Alfred, O.B.E., D.Sc., B.A., B.Sc.
(Engin.), F.G.S. Principal of the *Technical College, Green
Lane, Derby.*
- 1929 RICHEY, James Ernest, M.C., B.A., D.Sc., F.R.S.E., F.G.S.
Geological Survey of Great Britain (Scottish Office),
'*Southpark*', 19 *Grange Terrace, Edinburgh.*
- 1914 ROGERS, Arthur William, M.A., Sc.D., F.R.S. Formerly
Director of the Geological Survey of the Union of South
Africa. 8 *Rhodes Avenue, Mowbray, Cape Province, South
Africa.*

- Year of
Election.
- A 1913 ROGERS, Austin Flint, A.M., Ph.D. Professor of Mineralogy and Petrography, *Stanford University, California, U.S.A.*
- A 1935 ROSE, William Colin Campbell, M.Sc., F.G.S. *Geological Survey and Museum, Exhibition Road, South Kensington, London, S.W. 7*; and 2 Woodway Court, Woodway Crescent, Harrow, Middlesex.
- A 1902 RUSSELL, Arthur Edward Ian Montagu, M.B.E. *Swallowfield Park, Reading, Berkshire.*
- A 1929 SAMPSON, Edward, C.E., M.Sc., D.Sc. Associate Professor of Economic Geology, Princeton University, *Guyot Hall, Princeton, New Jersey, U.S.A.*
- A 1931 SCHAIRER, John Frank, M.S., Ph.D. *Geophysical Laboratory, 2801 Upton Street, Washington, D.C., U.S.A.*
- A 1912 SCHALLER, Waldemar Theodore, Ph.D. *United States Geological Survey, Washington, D.C., U.S.A.*
- A 1933 SCHEUMANN, Karl Hermann. Professor of Mineralogy and Petrology, *Mineralogical Institute, The University, 38 Talstrasse, Leipzig, Germany.*
- A 1919 SCHOELLER, Walter Raymond, Ph.D. 8 *Victoria Avenue, Bishopsgate, London, E.C. 2.*
- A 1920 SCHOEP, Alfred, D.Sc. Professor of Crystallography and Mineralogy in the University of Gent, 6 *Rue de la Roseaie, Gent, Belgium.*
- A 1928 SCHOLTZ, Douglas Leinster, D.Sc. Lecturer in Geology, *University of Pretoria, Transvaal, South Africa.*
- A 1914 SCOTT, Alexander, M.A., D.Sc. 'Eversley', *Albert Terrace, Wolstanton, Stoke-on-Trent, Staffordshire.*
- A 1932 SCRIVENOR, John Brooke, I.S.O., M.A., F.G.S. 68 *Chauce Road, Bedford.*
- A 1908 SHAND, Samuel James, D.Sc., Ph.D., F.G.S. Professor of Geology, *Columbia University, New York City, U.S.A.*
- A 1938 SHUKRI, Nasri Metri, B.Sc., F.G.S. c/o Dept. of Geology, *Imperial College of Science and Technology, South Kensington, London, S.W. 7.*
- A 1932 SILBERRAD, Charles Arthur, B.A., B.Sc. c/o *Mercantile Bank of India, 15 Gracechurch Street, London, E.C. 3.*

- Year of
Election.
- 1936 SIMMONS, William Charles, B.Sc., A.R.C.S., F.G.S.
'Trigonia', Spur Hill Avenue, Parkstone, Dorset.
- 1937 SIMMONS, William Percy. Assistant Curator, Royal Geological Society of Cornwall, *The Museum, Penzance*; and *Lelant, Cornwall.*
- 1912 SIMPSON, Edward Sydney, D.Sc., B.E., F.C.S. Government Mineralogist and Chemist, Western Australia. *'Carlingford', Mill Point, South Perth, Western Australia.*
- 1935 SMETHURST, Arthur Frederick, The Reverend, B.Sc., Ph.D., A.R.C.S., F.G.S., F.C.S., F.R.G.S. 441 *Banbury Road, Cutteslowe, Oxford.*
- 1897 SMITH, George Frederick Herbert, M.A., D.Sc., F.R.A.S. *British Museum of Natural History, South Kensington, London, S.W. 7*; and 9 *Ellerton Road, Wandsworth Common, London, S.W. 18.*
- 1911 SMITH, Herbert Gladstone, B.Sc., A.R.C.S., F.G.S. Reader in Geology in the University of London, *Queen Mary College, Mile End Road, London, E. 1.*
- 1910 SMITH, Walter Campbell, M.C., T.D., M.A., F.G.S. Keeper of Minerals in the British Museum, *British Museum of Natural History, South Kensington, London, S.W. 7.*
- 1933 SMYTHE, John Armstrong, D.Sc., Ph.D. Lecturer in Metallurgy, *King's College, University of Durham, Newcastle-on-Tyne*; and 10 *Queen's Gardens, Benton, Forest Hall, Northumberland.*
- 1929 SOLIGNAC, Marcel Jean Louis, D. ès Sc. Chef du Service Géologique de Tunisie, 12 *Rue Émile Duclaux, Tunis.*
- 1925 SPENCER, Edmondson, Ph.D., D.Sc., A.R.S.M., F.I.C., F.G.S. *c/o Messrs. Bird & Co. (Research Dept.), Post Box 46, Calcutta, India.*
- 1894 SPENCER, Leonard James, C.B.E., B.Sc., M.A., Sc.D., F.R.S. 111 *Albert Bridge Road, London, S.W. 11.*
- 1928 SPILLER, Reginald Charles, M.A. Demonstrator in Mineralogy, *Dept. of Mineralogy, University Museum, Oxford.*
- 1935 STANLEY, John Herbert. 58 *Dewsbury Road, Dollis Hill, London, N.W. 10.*

- Year of
Election.
- A 1923 STILLWELL, Frank Leslie, D.Sc. 44 *Elphin Grove, Hawthorne, Victoria, Australia.*
- A 1923 STOCKLEY, Gordon Murray, A.R.C.S., A.I.C., F.G.S. *Geological Survey, Lands and Mines Dept., Dodoma, Tanganyika Territory, East Africa.*
- A 1926 STUART, Alan, M.Sc., F.G.S. 32 *Gwydr Crescent, Uplands, Swansea, South Wales.*
- A 1928 SWEET, Miss Jessie May, B.Sc. *Mineral Dept., British Museum of Natural History, South Kensington, London, S.W. 7.*
- A 1925 TARR, William Arthur, B.Sc., B.S., Ph.D. Professor of Geology and Mineralogy, University of Missouri. 704 *Westwood Avenue, Columbia, Missouri, U.S.A.*
- A 1925 THOMSON, Ellis, B.A.Sc. Assistant Professor, *Dept. of Mineralogy, University of Toronto, Canada.*
- A 1921 TILLEY, Cecil Edgar, B.Sc., Ph.D., F.G.S. Professor of Mineralogy and Petrology, *Dept. of Mineralogy and Petrology, Downing Street, Cambridge.*
- A 1925 TOMKEIEFF, Sergei Ivanovich, M.Sc., F.G.S. *Geology Dept., King's College, University of Durham, Newcastle-on-Tyne.*
- A 1937 TOWNLEY, Kenneth Allison. '*Glenshane*', *Thatch Leach Lane, Whitefield, Manchester.*
- L 1927 TRECHMANN, Charles Taylor. D.Sc., F.G.S., F.Z.S. '*Hudworth Tower*', *Castle Eden, Co. Durham.*
- A 1923 TSUBOI, Seitārō. *Geological Institute, College of Science, Imperial University, Tokyo, Japan.*
- L 1920 TUNBRIDGE, Edward William, B.Sc., F.G.S. '*Westbury*' *Lillington, Leamington Spa, Warwickshire.*
- L 1891 TUTTON, Alfred Edwin Howard, M.A., D.Sc., F.R.S. '*Yew Arch*', *Dallington, Sussex.*
- A 1936 VANCE, Robert Christopher. *Woodland Road, Long Meadow, Pittsford, New York State, U.S.A.*
- A 1933 VAUX, George, B.S., F.R.G.S. '*The Thicket*', *Bryn Mawr, Pennsylvania, U.S.A.*
- A 1925 VENDL, Aladár, Ph.D. Professor in the Technical High School, *Rezeda utca 7, Budapest I, Hungary.*

Year of
Election.

- 1925 VENDL, Miklós, Ph.D. Professor of Mineralogy and Geology,
Mining Academy, Sopron, Hungary.
- 1937 VÉSIGNIÉ, Jean Paul Louis, Colonel (retired). 22 *Rue du*
Général Foy, Paris VIII, France.
- 1930 VICKERS, Arthur Eric Jarvis, M.Sc., Ph.D., F.I.C., F.G.S.
'Hazeldene', Junction Road, Norton-on-Tees, Co. Durham.
- 1937 VINCENT, Herbert Cubitt Gostling, M.A., F.G.S., F.C.S.
Dept. of Mineralogy and Petrology, Downing Street, Cam-
bridge.
- 1930 WAGER, Lawrence Rickard, M.A., B.Sc., F.G.S. *Dept. of*
Geology, University of Reading, Reading, Berkshire.
- 1930 WALKER, Frederick, M.A., Ph.D., D.Sc., F.R.S.E., F.G.S.
c/o Dept. of Mineralogy and Petrology, Downing Street,
Cambridge.
- 1936 WALLS, Robert, B.Sc., M.Sc. *c/o Lobitos Oilfields Co. Ltd.,*
Lobitos, Peru.
- 1937 WARBURG, Robert Oscar, B.A. *'Boidier', Headley, Epsom,*
Surrey.
- 1923 WATSON, John Adam, A.C.G.I., F.I.C., F.C.S. 26 *Thorburn*
Road, Colinton, Edinburgh.
- 1894 WATTS, William Whitehead, M.A., M.Sc., Sc.D., LL.D.,
F.R.S. Emeritus Professor of Geology in the Imperial
College of Science and Technology, London. *'Hillside',*
39 Langley Park Road, Sutton, Surrey.
- 1937 WAY, Henry James Reginald, B.Sc., A.R.S.M., F.G.S.
Geological Survey of Uganda, Entebbe, Uganda, East Africa.
- 1929 WAYLAND, Edward James, A.R.C.S., M.I.M.M., F.G.S.
Director of the *Geological Survey of Uganda, Entebbe,*
Uganda, East Africa.
- 1929 WEBER, Leonhard, Ph.D. Professor of Mineralogy in the
University, *Institut de Minéralogie, Université, Fribourg,*
Switzerland.
- 1929 WELLS, Alfred Kingsley, D.Sc., F.G.S. Reader in Geology
at King's College, London. 114 *Queen's Road, Buckhurst*
Hill, Essex.
- 1929 WEST, William Dixon, M.A. *Geological Survey of India,*
27 Chowringhee Road, Calcutta, India.

- | | Year of
Election. | |
|---|----------------------|--|
| L | 1901 | WESTON, Digby St. Aubyn Percy, Commander, Royal Navy (retired). 46 <i>Queen's Gate Gardens, London, S.W. 7.</i> |
| A | 1924 | WHITLOCK, Herbert Percy. <i>American Museum of Natural History, Central Park, New York City, U.S.A.</i> |
| A | 1918 | WILCOCKSON, William Howson, M.A., F.G.S. <i>Geological Dept., University of Sheffield.</i> |
| L | 1925 | WILLIAMS, Alpheus Fuller, B.Sc. <i>Ver Genoeg, Muizenberg, Cape Town, South Africa.</i> |
| A | 1933 | WILSON, Gilbert, Ph.D., M.Sc., D.I.C., F.G.S. <i>Geology Dept., University College, Gower Street, London, W.C. 1.</i> |
| A | 1931 | WILSON, Reginald Charles, D.Sc., F.G.S. Director of the <i>Geological Survey of Nigeria, Kaduna Junction, Nigeria; and 8 Duke's Avenue, Muswell Hill, London, N. 10.</i> |
| A | 1934 | WISEMAN, John Dugdale Holt, M.A., Ph.D., F.G.S. <i>Mineral Dept., British Museum of Natural History, South Kensington, London, S.W. 7.</i> |
| A | 1927 | WOOLDRIDGE, Sidney William, D.Sc., F.G.S. 7 <i>Shrewsbury Avenue, East Sheen, London, S.W. 14.</i> |
| A | 1927 | WOOSTER, William Alfred, M.A., Ph.D. Demonstrator in Mineralogy in the University of Cambridge. <i>Peterhouse, Cambridge.</i> |
| A | 1919 | WORTH, Richard Hansford, M.Inst.C.E., F.G.S. 32 <i>Thornhill Road, Plymouth.</i> |
| L | 1923 | WRIGHT, Frederic Eugene, Ph.D. <i>Geophysical Laboratory, 2801 Upton Street, Washington, D.C., U.S.A.</i> |
| A | 1937 | YATSEVITCH, Gratian Michael, A.B., A.M. <i>Cornish, New Hampshire, U.S.A.; and Zlot Mines Ltd., Zlot, Moravska Banovina, Yugoslavia.</i> |
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PROCEEDINGS

OF THE

MINERALOGICAL SOCIETY

EXCERPT MINUTES OF COUNCIL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., January 28, 1937, at 4 p.m.*

Dr. L. J. SPENCER, F.R.S., President, in the Chair.

The deaths of Mr. Thomas Crook, Vice-President, and Mr. Edward Amshaw Hopkins, both on January 6, were announced.

Dr. Friedrich Wilhelm Cassirer, Dr. Frank Dixey, Mr. Harold Irving Ever, Mr. Donald James Gear, Mr. John Vernon Harrison, and Colonel Paul Louis Vésignié were provisionally elected Ordinary Members of the Society.

The resignations of Mr. Harvey Collingridge, Dr. Gertrude L. Elles, Dr. H. E. Merwin were received and accepted. Mr. J. C. Taylor and K. Seto were removed from the list of members, being two years in arrears with subscriptions. Two other members one year in arrears were reported by the Treasurer.

The Treasurer presented the audited accounts for 1936. These were accepted and the Treasurer was again thanked for the care he had taken of the Society's financial well-being.

The Editor's report outlined the cost and contents of recent and forthcoming numbers of the Magazine.

The Library sub-committee reported on the exchange list of publications, and it was decided to cease sending to certain institutions at the end of the present volume of the Magazine.

The vacancy caused by the death of Mr. T. Crook was considered. F. C. E. Tilley was appointed Vice-President, and the vacancy on Council was filled by the co-option of Dr. G. F. Herbert Smith.

Vacancies in the list of Honorary Members were considered, and F. Charles Palache was provisionally elected.

The date of the next meeting was fixed for March 11 instead of March 18.

GENERAL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., January 28, 1937, at 5.30 p.m.*

Dr. L. J. SPENCER, F.R.S., President, in the Chair.

Thirty-seven Members and twenty-four Visitors were present.

The elections of Messrs. F. W. Cassirer, F. Dixey, H. I. Drever, D. J. Gear, J. V. Harrison, and J. P. L. Vésignié as Ordinary Members of the Society were confirmed.

Dr. A. T. J. Dollar exhibited a device for counting mineral grains, Miss A. J. Hall a modified Kunitz centrifuge, and Mr. Arthur Russell specimens of rhodonite from Lidcott mine, Laneast, Cornwall. Specimens were also exhibited in illustration of papers by Dr. Edmondson Spencer and Messrs. Brammall, Leech, and Bannister.

The following papers were then read and discussed:—

1. The potash-soda-felspars: by Dr. Edmondson Spencer (vol. 24, p. 453).

2. Paragenesis of cookeite, hydromuscovite, and free gold from Ogofau, Carmarthenshire: by Dr. Alfred Brammall, Major J. G. C. Leech, and Mr. F. A. Bannister (vol. 24, p. 507).

3. Note on optically-positive hypersthene from Manchuria: by Dr. K. Tsuru and Mr. N. F. M. Henry (vol. 24, p. 527).

4. A note on an interesting occurrence of lawsonite in glaucophane-bearing rocks from New Caledonia: by Dr. Germaine A. Joplin (vol. 24, p. 534).

5. An occurrence of the mineral pumpellyite in the Lake Wakatipu region, western Otago, New Zealand: by Mr. C. Osborne Hutton (vol. 24, p. 529).

6. The tektite problem: by Dr. L. J. Spencer (taken as read) (vol. 24, p. 503).

EXCERPT MINUTES OF COUNCIL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., March 11, 1937, at 4 p.m.*

Dr. L. J. SPENCER, F.R.S., President, in the Chair.

The deaths of Sir Albert Ernest Kitson, on March 8, and Prof. Alexander Hamilton Phillips, on January 20, were announced.

Mr. Francis George Henry Blyth, Prof. Heinrich Ferdinand Huttenlocher, Mr. Arthur Montgomery, Mr. Robert Oscar Warburg, and Mr.

Mr. James Reginald Way were provisionally elected Ordinary Members of the Society.

The vacancies in the list of Honorary Members were further considered, and Prof. Thomas Leonard Walker was provisionally elected.

Reports were received from the Treasurer and the Editor.

The sub-committee on bibliographical references and abbreviations submitted a report. There was no agreement for the adoption of any particular method.

GENERAL MEETING

Held in the Apartments of the Geological Society, Burlington House, London, W., March 11, 1937, at 5.30 p.m.

Dr. L. J. SPENCER, F.R.S., President, in the Chair.

Thirty-six Members and one Visitor were present.

The elections of Messrs. F. G. H. Blyth, H. F. Huttenlocher, A. Montgomery, R. O. Warburg, and H. J. R. Way as Ordinary Members of the Society were confirmed.

Prof. Charles Palache of Harvard University and Prof. Thomas Leonard Walker of Toronto were proposed as Honorary Members from the chair and were unanimously elected.

The following papers were read and discussed:—

A universal ore-polishing machine: by Dr. F. C. Phillips (vol. 24, p. 595).

On the occurrence of turquoise in Cornwall: by Mr. Arthur Russell.

The deuteric mineral sequence in the Enoggera granite, Queensland: by Miss Marjorie J. Whitehouse (vol. 24, p. 538).

X-ray data on rhodonite, pyroxmangite, and iron-rhodonite: by M. Perutz, communicated by Prof. C. E. Tilley (vol. 24, p. 573).

Specimens were exhibited in illustration of the papers by Dr. F. C. Phillips and Mr. Arthur Russell, and Dr. A. T. J. Dollar exhibited a new form of compass variometer for mapping hidden basic dikes.

EXCERPT MINUTES OF COUNCIL MEETING

Held in the Apartments of the Geological Society, Burlington House, London, W., June 24, 1937, at 4.15 p.m.

Dr. L. J. SPENCER, F.R.S., President, in the Chair.

Messrs. George Penrose, William Percy Simmons, Kenneth Allison Glynley, Herbert Cubitt Gostling Vincent, and Gratian Michael Yatseff were provisionally elected Ordinary Members of the Society.

Reports were received from the Treasurer and the Editor. On the proposal of the Treasurer it was agreed to promise a donation of £30 towards the expenses of the International Geological Congress if held in London in 1940.

The list of Officers and Council for 1937-38 was considered. The President announced that the General Secretary had told him that he wished to retire in November at the end of ten years in office. After discussion the General Secretary agreed to remain in office until November 1938 in order to give full opportunity to the Council to select his successor. No change in the list of Officers was proposed. The Ordinary Members of Council due to retire were Prof. A. Brammall, Mr. C. W. Mathews, Prof. T. C. Phemister, and Mr. A. Broughton Edge. The following were agreed upon for submission to the Society: previous Members of Council—Prof. C. G. Cullis and Dr. F. C. Phillips; new Members—Dr. G. F. Claringbull and Sir Lewis L. Fermor.

The dates for meetings in 1938 were arranged as follows: Thursdays, January 27, March 10, June 9, and November 3.

Letters thanking the Society for having elected them Honorary Members were received from Prof. Charles Palache and Prof. T. L. Walker.

GENERAL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., June 24, 1937, at 5.30 p.m.*

Dr. L. J. SPENCER, F.R.S., President, in the Chair.

Twenty-eight Members and two Visitors were present.

The elections of Messrs. G. Penrose, W. P. Simmons, K. A. Townley, H. C. G. Vincent, and G. M. Yatsevitch as Ordinary Members of the Society were confirmed.

Dr. A. T. J. Dollar exhibited a photo-electric thermostat for controlling laboratory electric furnaces.

The following papers were read and discussed:—

1. Wollastonite solid solutions from Scawt Hill, Co. Antrim: by Prof. C. E. Tilley (vol. 24, p. 569).

2. Notes on silicate synthesis with a laboratory gas furnace: by Dr. A. T. J. Dollar.

3. Some new pyroxenes included in the system clinoenstatite, clino-hypersthene, diopside, hedenbergite: by Dr. W. A. Deer and Mr. L. R. Wager (vol. 25, p. 15).

A new micro-pyknometric method for the specific gravity of heavy
ds; with a note on the accuracy of specific gravity determinations:
Mr. F. A. Bannister and Dr. M. H. Hey (vol. 25, p. 30).

An occurrence of corundum at Fraserburgh, Aberdeenshire: by
Robert Walls.

A review of the data of the Mg-Fe-clinopyroxenes: by Mr. N. F. M.
ary (vol. 25, p. 23).

The following papers were taken as read:—

Fourteenth list of new mineral names: by Dr. L. J. Spencer (vol.
p. 601).

Paragenesis of kyanite-amphibolites: by Prof. C. E. Tilley, with
chemical analyses by Mr. H. C. G. Vincent (vol. 24, p. 555).

EXCERPT MINUTES OF COUNCIL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., November 4, 1937, at 4 p.m.*

Dr. L. J. SPENCER, F.R.S., President, in the Chair.

The deaths of Prof. Reinhard Brauns, Honorary Member, on January
1937, and Mr. John Williams Daw, Life Member, in 1934, were
noted. The resignation of Mr. John Herbert Thomas was received
and accepted.

Messrs. Frederick William Dennis, Tom Eastwood, and Philip Malcolm
were provisionally elected Ordinary Members of the Society.

Reports were received from the Treasurer and the Editor. In view
of the low numbers of certain recent issues of the Magazine remaining
in stock, it was decided to increase the numbers of copies printed
to 50.

The report of the Library committee was presented. The offer of the
Society's Library to members had resulted in only very small sales.
Several firms of booksellers had been asked to tender for the remainder
(except the reserved periodicals), and the highest tender was accepted.
The General Secretary presented the draft annual report which was
approved.

A letter of thanks was received from the Geological Society for
the financial assistance in connexion with the XVIII Session of the
International Geological Congress to be held in London in 1940.

After some discussion on the spelling of felspar or feldspar, it was
decided that the Nomenclature Committee be dissolved.

GENERAL (ANNIVERSARY) MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., November 4, 1937, at 5.30 p.m.*

Dr. L. J. SPENCER, F.R.S., President, in the Chair.

Forty Members and one Visitor were present.

Drs. Malcolm MacGregor and S. R. Nockolds were appointed as scrutineers of the voting-papers for the election of Officers and Council.

The elections of Messrs. F. W. Dennis, T. Eastwood, and P. M. Game as Ordinary Members were confirmed.

The General Secretary then read the following:—

ANNUAL REPORT OF COUNCIL FOR 1936-1937.

Four ordinary meetings have been held, 22 papers have been read, and 8 exhibits have been made during the session. The attendance at the four meetings totalled 184 including 38 visitors. The total membership on October 31, 1937, was 252 including 8 honorary members. Professors Charles Palache of Harvard and T. L. Walker of Toronto were elected honorary members and 21 ordinary members have been elected. During the year five members have resigned, three have ceased to be members owing to non-payment of subscriptions, and the Society has lost by death, one honorary member, Professor Reinhard Brauns, a Vice-President, Mr. Thomas Crook, and four ordinary members, Mr. John W. Daw, Mr. Edward G. Hopkins, Sir Albert Kitson, and Professor A. H. Phillips. Four numbers of the Mineralogical Magazine (Nos. 155-158) have been issued during the session. They contain twenty-one papers in 262 pages with 47 figures and 11 plates, also 12 pages of proceedings. Mineralogical Abstracts published with these numbers contain 677 abstracts in 200 pages.

The accounts for the year ending December 31, 1936, showed an excess of assets over liabilities of £1363 18s. 4d. against £1250 13s. 5d. on December 31, 1935. These assets do not include the Library and unsold stock of publications, nor the Securities allocated to the Composition Fees Account. The value of the securities standing in the names of the Trustees on December 31, 1936, was: General Reserve £1048 11s. 4d., Composition Fees Account £1065 12s. 8d., against £996 11s. 7d. and £1055 17s. 0d. respectively on December 31, 1935. One Composition Fee was received during the year.

Following on the decision of the Council to dispose of the bulk of the Society's Library the books were offered for sale to the members. This resulted in the sale of only a few books. Firms of leading London booksellers have now been invited to tender for the remainder of the library. 116 parts of periodicals, &c., have been received during the year and 48 have been borrowed (almost all by the Editor for abstracting).

A sub-committee of the Council was nominated to consider proposals put forward by the Royal Society for standardized methods of giving bibliographical references and for standardized abbreviations. The President represented the Society at a joint meeting of representatives of scientific societies on December 15, 1936, and the sub-committee reported to Council on March 11, 1937. No agreement was reached on the standardized methods proposed.

Mr Lewis L. Fermor proposed the adoption of the Report; this was seconded by Prof. H. L. Bowman and carried unanimously.

The scrutineers reported that 51 voting-papers for the Officers and Council for the ensuing year had been received and that the list nominated by the Council had been approved. The President declared the Officers and Ordinary Members of Council elected:—

President. Dr. L. J. Spencer, C.B.E., M.A., Sc.D., F.R.S.

Vice-Presidents. Prof. P. G. H. Boswell, O.B.E., D.Sc., F.R.S.

Prof. C. E. Tilley, B.Sc., Ph.D., F.G.S.

Treasurer. F. N. Ashcroft, M.A., F.G.S., F.C.S.

General Secretary. W. Campbell Smith, M.C., T.D., M.A., F.G.S.

Foreign Secretary. Prof. A. Hutchinson, O.B.E., M.A., Ph.D., F.R.S.

Editor of the Journal. Dr. L. J. Spencer, C.B.E., M.A., Sc.D., F.R.S.

Ordinary Members of Council.

H. H. Read, D.Sc., F.G.S.

Mr Russell, M.B.E.

C. Spiller, M.A.

Gilbert Wilson, Ph.D., M.Sc., F.G.S.

A. F. Hallimond, M.A., Sc.D., F.G.S.

W. Anderson, B.Sc., F.C.S.

M. H. Hey, M.A., D.Sc., F.C.S.

Dr. G. F. Herbert Smith, M.A., D.Sc., F.R.A.S.

Prof. C. G. Cullis, D.Sc., M.I.M.M., F.G.S.

Dr. F. C. Phillips, M.A., Ph.D., F.G.S.

Dr. G. F. Claringbull, B.Sc., Ph.D., F.G.S.

Sir Lewis L. Fermor, O.B.E., D.Sc., F.R.S.

A vote of thanks to the retiring Members of Council, Prof. A. Small, Mr. A. Broughton Edge, Mr. C. W. Mathews, and Prof. T. C. Winter, was proposed by Dr. W. R. Jones; this was seconded by L. Hawkes and carried unanimously.

Mr M. H. Hey proposed that the thanks of the Society be sent to the Geological Society of London for allowing the Mineralogical Society to use their rooms for meetings during the year. This was seconded and carried unanimously.

The President proposed a vote of thanks to the abstractors and read out of these to the meeting.

Exhibits at this meeting were the following:—

Beryl from the Beam mine, St. Austell, Cornwall; an old specimen from the collection of the Geological Survey and Museum (Dr. A. F. Hallimond).

[continued on p. xlii]

MINERALOGICAL

ABSTRACT OF RECEIPTS AND PAYMENTS

GENERAL PUR-

RECEIPTS		£	s.	d.	£	s.	d.
By Balances brought forward from 1936—							
1. At Bankers:							
(a) Current Account	.	.	.	.	.	34	16 7
(b) Deposit Account	.	.	.	.	.	195	0 0
2. In Office	.	.	.	.	.	0	8 11
Entrance Fees	.	.	.	.	.		230 5 6
							22 1 0
Annual Subscriptions—							
1. Current year	.	.	.	.	.	194	0 3
2. Arrears	.	.	.	.	.	4	4 0
3. Advance	.	.	.	.	.	6	6 0
							204 10 3
Sale of Publications—							
1. By Publishers, April 1, 1936–March 31, 1937.							
Sales at subscription rate £244 0s. 0d. and other sales £36 1s. 0d., less trade discount and commission £73 0s. 4d., and distribution charges £11 13s. 6d.							
						195	7 2
2. By Custodian of Stock, 1937. £36 2s. 0d. less distribution charges £1 13s. 1d.							
						34	8 11
							229 16 1
Advertisement Fees, £23 15s. 2d., less commission £4 15s. 0d.							
							19 0 2
Interest on Investments as received—							
1. £640 3½% War Loan 1952 and after, Inscribed Stock							
						22	8 0
2. £105 4% Consolidated Loan 1957, Inscribed Stock							
						4	4 0
3. £100 4% Funding Loan 1960 90, Inscribed Stock							
						4	0 0
4. £201 Metropolitan Water Board 3% 'B' Stock, Inscribed							
						4	4 0
							34 16 0
Deposit Interest—							
1. Bankers							
						1	9 0
2. Post Office Savings Bank							
						2	16 3
							4 5 3
Proceeds of sale of Library							
							54 6 8
Small Receipts							
						0	1 4
Transfers from other accounts—							
From Composition Fees Account, being Interest on Investments							
							35 4 9
							£834 7 0

OCIETY

FOR THE YEAR ENDING DECEMBER 31, 1937

EXPENSES ACCOUNT

PAYMENTS		£	s.	d.	£	s.	d.
Printing and distributing the Mineralogical Magazine Nos. 156-159 inclusive (Oxford University Press)—							
1. Printing	.	338	9	6			
2. Illustrations	.	39	17	6			
3. Authors' Separate Copies	.	26	6	6			
4. Distribution Charges	.	15	11	6			
5. Postal wrappers (renewal of stock)	.	2	4	6			
					422	9	6
Printing and distributing Notices of Meetings and other annual miscellaneous printing							
					16	6	0
Miscellaneous Printing &c. (not annual)—							
Notices re disposal of Library	.				1	1	0
Expenses at Meetings—							
1. Operator of lantern	.	2	2	0			
2. Porter	.	1	0	0			
3. Tea	.	3	18	0			
					7	0	0
Share of Stock of Publications, J. Mugford, Annual Fee	.				1	1	0
Editor's Honorarium	.				50	0	0
Librarian's Honorarium	.				5	0	0
Postage—							
1. Hon. Secretary	.	1	0	8			
2. Editor	.	0	17	11			
3. Librarian	.	0	10	11			
4. Hon. Treasurer (not charged)	.	0	0	0			
					2	9	6
Contribution towards the expenses of the proposed International Geological Congress, 1940							
					30	0	0
Bank charges and other small items							
					0	7	8
Investments (including proceeds of the sale of the Library) Purchase of £61 Metropolitan Water Board 3% 'B' Stock, Inscribed							
					54	16	4
Balance, December 31, 1937—							
1. At Bankers:							
(a) Current Account	.	25	7	5			
(b) Deposit Account	.	65	0	0			
2. Post Office Savings Bank	.	152	16	3			
3. In Office	.	0	12	4			
					243	16	0
					£834	7	0

Examined and compared with Vouchers and found correct.

F. A. BANNISTER }
GILBERT WILSON } Auditors.

January 13, 1937.

F. N. ASHCROFT, Hon. Treasurer.

BALANCE

		DECEMBER		
		£	s.	d.
LIABILITIES		£	s.	d.
To Annual Subscriptions received in advance—				
1. Received in 1936 for 1938		1	1	0
2. Received in 1937 for 1938		6	6	0
Sundry Creditors—				
			7	7
			0	0

Excess of Assets over Liabilities		1427	15	3
		£1435	2	3

COMPOSITION FEES ACCOUNT

		£	s.	d.
RECEIPTS		£	s.	d.
By Composition Fees received as per last Account		1165	10	0
Composition Fee received during year		15	15	0
Interest on Investments as received—			1181	5
1. £975 3½% War Loan 1952 and after, Inscribed Stock		34	2	6
2. £26 3% Conversion Loan 1948–52, Inscribed Stock		0	10	9
3. £26 14s. 0d. Metropolitan Water Board 3% 'B' Stock, Inscribed		0	16	0
			35	9

£1216 14 3

MEET

1937

	ASSETS	£	s.	d.	£	s.	d.
Balances—							
1. At Bankers:							
(a) Current Account		25	7	5			
(b) Deposit Account		65	0	0			
2. In Post Office Savings Bank		152	16	3			
3. In Office		0	12	4			
					243	16	0

and Dry Debtors—

Publishers (Oxford University Press):

(a) For sales of Publications, April 1–Dec. 31, 1937	113	14	8				
(b) For advertisement Fees, April 1–Dec. 31, 1937	12	12	9				
				126	7	5	

Investments at Brokers' Valuation—

1. £640 3½% War Loan 1952 and after, Inscribed Stock, at 101¾%	651	4	0				
2. £105 4% Consolidated Loan 1957, Inscribed Stock, at 109¾%	114	16	10				
3. £100 4% Funding Loan 1960–90, Inscribed Stock, at 112¾%	112	15	0				
4. £201 Metropolitan Water Board 3% 'B' Stock, Inscribed, at 90%	180	18	0				
				1059	13	10	
Annual Subscriptions in arrear (£8 8s. 9d.) estimated to realize				5	5	0	
				£1435	2	3	

Note. The value of the periodicals retained after the disposal of the Library, of the unsold Stock of Publications, and the Securities allocated to the Commission Fees Account are not included in the above assets.

January 13, 1938.

F. N. ASHCROFT, Hon. Treasurer.

YEAR ENDING DECEMBER 31, 1937

	PAYMENTS	£	s.	d.	£	s.	d.
Investments as per last Account—							
1. 975 3½% War Loan 1952 and after, Inscribed Stock, valued by Brokers at £992 1s. 3d. (101¾%), at cost	1128	15	0				
2. £10 4s. 8d. 3% Conversion Loan 1948–52, Inscribed Stock, valued by Brokers at £10 8s. 6d. (101¾%), at cost	10	10	0				
3. £26 14s. 0d. Metropolitan Water Board 3% 'B' Stock, Inscribed, valued by Brokers at £24 0s. 7d. (90%), at cost	26	5	0				
	1165	10	0				

Investment made during year. Purchase of £15 15s. 4d. 3% Conversion Loan 1948–52, Inscribed Stock, valued by Brokers at £16 0s. 10d. (101¾%), at cost

	15	19	6				
				1181	9	6	
Income transferred to General Purposes Account				35	4	9	
				£1216	14	3	

Examined and compared with vouchers and found correct.

F. A. BANNISTER } Auditors.
GILBERT WILSON }

January 13, 1938.

F. N. ASHCROFT, Hon. Treasurer.

2. Meteorites and photographs of meteorites from Texas, Kansas, Nebraska, and New Mexico, illustrating finds made by Dr. H. H. Nininger in the last few years (Mr. F. W. Cassirer).

3. Minerals from Castle-au-Dinas mine, Cornwall, including cassiterite, topaz, arsenopyrite, native bismuth, turquoise, scorodite on wavelite, and russellite; also bismuthinite from St. Wenn, and beryl and cassiterite from St. Michael's Mount, Cornwall (Mr. Arthur Russell).

4. A contact model of the crystal-structure of muscovite (Mineral Department, British Museum).

5. A device for automatically counting the numbers, up to six different kinds, of mineral grains while their diameters are being measured by a recording micrometer (Dr. A. T. J. Dollar).

The following papers were then read and discussed:—

1. Scawtite pseudomorphs after spurrite at Scawt Hill, Co. Antrim: by Prof. C. E. Tilley (vol. 25, p. 38).

2. The occurrence of acmite in the riebeckite-microgranite of Mynydd Mawr, Caernarvonshire: by Dr. S. R. Nockolds (vol. 25, p. 35).

3. The composition and paragenesis of the hornblendes of the Glen Tilt complex, Perthshire: by Dr. W. A. Deer.

4. Russellite, a new British mineral: by Mr. F. A. Bannister and Dr. M. H. Hey.

5. A re-examination of cliftonite: by Dr. M. H. Hey.

PROCEEDINGS
OF THE
MINERALOGICAL SOCIETY
(1938)

EXCERPT MINUTES OF COUNCIL MEETING

*held in the Apartments of the Geological Society, Burlington House,
London, W., January 27, 1938, at 4.15 p.m.*

Dr. L. J. SPENCER, F.R.S., President, in the Chair.

The deaths of Professor Arthur Hutchinson, Foreign Secretary and a President, on December 12, 1937, and of Professor Antonio de Almeida Barreto were announced.

The resignations of Mr. Henry Dewey and of Dr. K. W. Earle were received and accepted.

Mr. Kingsley Charles Dunham, Mr. Charles Edward Marshall, Mr. James Payne, and Mr. Nasri Metri Shukri were proposed and provisionally elected Ordinary Members of the Society.

Approval was given for the appointment of Mr. F. A. Bannister and Gilbert Wilson as the auditors of the Society's accounts.

The Treasurer presented the audited accounts and balance sheet for 1937, which were approved; and he gave a general review of the Society's financial position.

The Editor's report included mention of a four per cent. increase in printing costs.

Mr. A. E. H. Tutton was elected Foreign Secretary to fill the vacancy caused by the death of Professor Arthur Hutchinson.

The General Secretary reported on the disposal of the unwanted minerals and books in the Society's library.

A letter was received from the Geological Society giving permission for the use of its rooms on the meeting days arranged for 1938.

GENERAL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., January 27, 1938, at 5.30 p.m.*

Dr. L. J. SPENCER, F.R.S., President, in the Chair.

Forty-six Members and ten Visitors were present.

The President announced the death of Professor Arthur Hutchinson, Foreign Secretary and a past-President, on December 12, 1937, and spoke of his work for the Society and for Mineralogy, the members present standing.

The elections of Dr. K. C. Dunham, Messrs. C. E. Marshall, C. J. Payne, and N. M. Shukri as Ordinary Members of the Society were confirmed.

Professor C. E. Tilley exhibited lamprophyllite from the Kola Peninsula and molengraaffite from Transvaal, and stated their identity.

The following papers were then read and discussed:—

1. The paragenesis of a Malvern hydrobiotite, and the variable content of hydroxyl in micas generally: by Prof. A. Brammall, Mr. F. A. Banister, and Mr. J. G. C. Leech.

Experiments were performed to demonstrate the rapid hydrolysis of some micas and other minerals in a dilute brine solution.

2. Curvature in crystals of vein-quartz: by Dr. A. T. J. Dollar.

3. A petrographical description of lundyite from Lundy Island, Bristol Channel: by Dr. A. T. J. Dollar.

4. The Kaalijärvi meteorite from the Estonian craters: by Dr. L. J. Spencer (p. 75).

EXCERPT MINUTES OF COUNCIL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., March 10, 1938, at 4.15 p.m.*

Dr. L. J. SPENCER, F.R.S., President, in the Chair.

Mr. Donald Frederick Ashby, Mr. William James Dunstall, Dr. John Cedric Griffiths, Prof. Paul Francis Kerr, Dr. Gunther Nagelschmidt, Prof. Ugo Panichi, Dr. Frederick H. Pough, Prof. William John Pugh, Dr. Robert Millner Shackleton, Mr. Frank Edward Studt, and Dr. David Williams were proposed and provisionally elected Ordinary Members of the Society.

ports were received from the Treasurer and the Editor.

An invitation was received from the Director of H.M. Geological Survey to visit the Museum and Survey Offices on a Saturday in June or September. It was decided to accept the invitation with thanks and to ask the Director if June 18 would be a convenient date.

GENERAL MEETING

*held in the Apartments of the Geological Society, Burlington House,
London, W., March 10, 1938, at 5.30 p.m.*

Dr. L. J. SPENCER, F.R.S., President, in the Chair.

Forty-three Members and nine Visitors were present.

The elections of Messrs. D. F. Ashby, W. J. Dunstall, J. C. Griffiths, J. Kerr, G. Nagelschmidt, U. Panichi, F. H. Pough, W. J. Pugh, J. Shackleton, F. E. Studt, and D. Williams as Ordinary Members of the Society were confirmed.

The following exhibits were briefly explained:—

An imitation topaz made of yellow glass with unusually high refractive index 1.777 (Mr. B. W. Anderson).

A manuscript catalogue of Philip Rashleigh's collection of minerals and mineral entries made by him between 1784 and 1804, on loan from the British Museum. Pages were shown containing descriptions of chalcocite, connellite, and pharmacosiderite, written some fifteen years before these minerals were named (Mr. Arthur Russell).

Specimens of hemimorphite from Millock mine, Derbyshire; cassiterite from Minas Vellas, Portugal; apatite and quartz from Bovey, Devonshire; withamite from Glen Coe, Scotland; wollastonite from Okehampton, Devonshire; and chalcopyrite from Blackhead, Scotland (Mr. Arthur Russell).

A block of grey cast iron (pseudo-meteorite) found in the foundation of a building near the Kaalijärvi meteorite crater in Estonia (Dr. Spencer) (p. 79).

A plaster cast of the earliest known australite figured by Charles Darwin in 1844; plaster cast of an australite said to have been heard of at Lake Grace, Western Australia; and deeply corroded billitonite from Billiton, Dutch East Indies (Mr. W. Campbell Smith).

A device to facilitate the matching of refractive indices of mineral specimens with those of immersion liquids (Dr. A. T. J. Dollar).

The following papers were then read and discussed:—

1. Tabular spessartine crystals in muscovite: by Prof. E. D. Mount and Mr. L. E. Kent (p. 125).
2. On the nature of withamite: by Mr. C. O. Hutton (p. 119).
3. Australites: a unique shower of glass meteorites: by Dr. Charles Fenner (p. 82).
4. The stilpnomelane group of minerals: by Mr. C. O. Hutton (p. 172).
5. The rare-earth content of the fluorite of England and Wales: by Mr. V. L. Aspland, Prof. A. Brammall, and Mr. J. G. C. Leech.

EXCERPT MINUTES OF COUNCIL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., June 9, 1938, at 4 p.m.*

Dr. L. J. SPENCER, F.R.S., President, in the Chair.

The death of Mr. A. H. Morgan on December 3, 1936, was announced. Mr. Leonard Gascoigne Berry, Dr. Arthur Lennox Coulson, Mr. Arthur William Gerald Kingsbury, Dr. Victor Ben Meen, Mr. George Stainbank Mockler, Mr. William Parrish, and Dr. Gordon van Praagh were proposed and provisionally elected Ordinary Members of the Society.

Reports were received from the Treasurer and the Editor.

The list of Officers and Council for 1938–39 was considered. The following were due to retire: Vice-President, Prof. P. G. H. Boswell; General Secretary, Mr. W. Campbell Smith; Ordinary Members of Council, Prof. H. H. Read, Mr. Arthur Russell, Mr. R. C. Spiller, and Dr. Gilbert Wilson. The following were proposed for submission to the Society: as Vice-President, Mr. W. Campbell Smith; as General Secretary, Dr. G. F. Claringbull; as Ordinary Members of Council, Prof. H. Bowman, Dr. H. F. Harwood, Mr. G. E. Howling, Dr. W. F. P. McLintock, and Dr. J. Phemister.

The dates for the meetings in 1939 were fixed for Thursdays, January 26, March 9, June 8, November 9.

A letter was received from the Chairman of the Excursions Committee of the XVIII International Geological Congress asking the Society to organize a special mineralogical excursion to Cornwall in accordance with an itinerary suggested by Mr. Arthur Russell. This was agreed to. Mr. Russell was appointed as convener, Dr. G. F. Claringbull as secretary, and Mr. E. H. Davison and Mr. W. Campbell Smith as members of the committee.

GENERAL MEETING

*held in the Apartments of the Geological Society, Burlington House,
London, W., June 9, 1938, at 5.30 p.m.*

Dr. L. J. SPENCER, F.R.S., President, in the Chair.

Forty-two Members and five Visitors were present.

The elections of Messrs. L. G. Berry, A. L. Coulson, A. W. G. Kings-
V. B. Meen, G. S. Mockler, W. Parrish, and G. van Praagh as
Ordinary Members of the Society were confirmed.

The arrangements for the visit of the Society to the Geological Survey
Museum on June 18 were announced.

The following exhibits were briefly explained:—

Specimens and models of some Carlsbad-Manebach twin associa-
tions observed in orthoclase (by Dr. J. Drugman) (p. 1).

A large crystal of cassiterite from Northern Nigeria; timber from
the water-wheel at Rio Tinto partly replaced by metallic copper; horn-
blende-gneiss from Church Cove, Lizard, Cornwall (Mr. E. H. Davison).

Plates and diagrams prepared from his photographs for the forth-
coming book 'Die Mineralien der Schweizer Alpen' by J. Koenigsberger,
G. Egli, and R. L. Parker (Mr. F. N. Ashcroft).

The following papers were then read and discussed:—

The leaching of granite and some other rocks: by Mr. E. H. Davison
(p. 17).

Some new and little-known meteorites found in Western Australia:
by Mr. E. S. Simpson (read by Dr. L. J. Spencer) (p. 157).

Francolite from sedimentary ironstones of the Coal Measures:
by Mr. T. Deans, with chemical analysis by Mr. H. C. G. Vincent
(p. 35).

On the atomic arrangement and variability of the members of the
morillonite group: by Dr. G. Nagelschmidt (p. 140).

On chamosite and daphnite: by Dr. A. F. Hallimond.

The identity of zinckenite and keeleyite: by Mr. G. Vaux and Mr.
Bannister (p. 221).

A chemical and optical study of a low-grade metamorphic actino-
amphibole from Coronet Peak, western Otago, New Zealand: by
Mr. J. O. Hutton (p. 207).

An X-ray examination of mordenite (ptilolite): by Mr. C. Way-
mouth, Mr. P. C. Thorneley, and Dr. W. H. Taylor (p. 212).

EXCERPT MINUTES OF COUNCIL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., November 3, 1938, at 4 p.m.*

Dr. L. J. SPENCER, F.R.S., President, in the Chair.

The death of Dr. A. E. H. Tutton, Foreign Secretary and a past President, on July 14 was announced.

The resignations of Dr. O. L. Brady and Mr. F. I. G. Rawlings were received and accepted.

Dr. Anant Gopal Jhingran, Dr. Rex Tregilgas Prider, Dr. William Hodge Taylor, and Dr. George Walter Tyrrell were proposed and provisionally elected Ordinary Members of the Society.

Reports were received from the Treasurer and the Editor.

On the proposal of the President, Sir Thomas H. Holland, past President of the Society, was appointed Foreign Secretary to fill the vacancy caused by the death of Dr. A. E. H. Tutton.

The General Secretary presented the draft annual report of Council which was approved.

Dr. Gilbert Wilson and Dr. A. F. Hallimond were appointed auditors of the Society's accounts.

A letter was received from the Geological Society giving permission for the use of its rooms as heretofore.

GENERAL (ANNIVERSARY) MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., November 3, 1938, at 5.30 p.m.*

Dr. L. J. SPENCER, F.R.S., President, in the Chair.

Thirty-seven Members and three Visitors were present.

Dr. A. E. J. Vickers and Dr. J. D. H. Wiseman were appointed as scrutineers of the voting papers for the election of Officers and Council.

The President announced the death of Dr. A. E. H. Tutton, Foreign Secretary and a past-President, on July 14, and spoke with warm appreciation of his work and his continual support of the Society, the member present standing.

The elections of Drs. A. G. Jhingran, R. T. Prider, W. H. Taylor, and G. W. Tyrrell as Ordinary Members of the Society were confirmed.

The General Secretary then read the following:—

ANNUAL REPORT OF COUNCIL FOR 1937–1938.

During the Session 1937–1938 four ordinary meetings have been held at which papers were read. The total attendance at the meetings was 161 members and visitors.

The Society has lost by death two ordinary members, Professor Antonio de Barros Botelho, of São Paulo, Brazil, and Mr. A. H. Morgan, formerly Superintendent of Ruby Mines at Mogok, and two of its past-Presidents and Foreign Secretaries, Professor Arthur Hutchinson on December 12, 1937, and Dr. A. E. H. Tutton on January 14, 1938.

Twenty-five new members have been elected and three members have resigned. The membership on October 31 stood at 269, including 8 honorary members.

During the year Nos. 159–162 of the Magazine have been issued. No. 159 issued in December, 1937, contains the index to volume 24 of the Magazine and to volume 24 of the Mineralogical Abstracts and contains about 11,000 entries. Nos. 160–162 of the Proceedings, 16 papers occupying 155 pages, with 5 plates, and 561 facts occupying 166 pages.

The accounts for the year ending December 31, 1937, showed an excess of assets over liabilities of £1427 15s. 3d. against £1363 18s. 4d. on December 31, 1936. The assets do not include the periodicals retained after the disposal of the main part of the Library and the unsold stock of publications, nor the securities allocated to the Composition Fees Account. The value of the securities standing in the names of the Trustees on December 31, 1937, was: General Reserve £1059 13s. 10d., Composition Fees Account £1042 11s. 2d., against £1048 11s. 4d. and £1065 12s. 8d. respectively on December 31, 1936. One Composition Fee was received during the year. The books in the Society's Library, remaining after certain periodicals had been set aside for retention and after sale of some books to members, were sold for £50. The proceeds of this and of earlier sales amounting to £4 6s. 8d. were used, Metropolitan Water Board 3% 'B' Stock being purchased. A donation of £100 was made towards the cost of the XVIIIth Session of the International Geological Congress, which is to take place in London in 1940.

On the invitation of the Director of the Geological Survey, twenty-six members and five guests of the Society paid a visit to the Survey Offices and Museum on November 18. The party was met by the Deputy Director, and a most interesting series of exhibits, both in the public galleries and the laboratories, were explained by members of the staff. At tea in the conference room the President returned thanks to the Geological Survey for a very interesting and instructive afternoon.

The adoption of the Annual Report was moved by Mr. A. Broughton and seconded by Prof. H. L. Bowman, and carried unanimously. Mr. Arthur Russell proposed a vote of thanks to the Geological Society for the use of its rooms during the past session. This was seconded by Mr. L. H. Hey and carried with acclamation.

The scrutineers reported that 50 voting papers had been received and the list of Officers and Members of Council nominated by the Council had been approved. The President announced that Sir Thomas H. Morgan had been appointed by the Council to be Foreign Secretary in

place of Dr. A. E. H. Tutton, whose death occurred after he had been nominated by the Council for that office in June. He then read the list as follows:—

President. Dr. L. J. Spencer, C.B.E., M.A., Sc.D., F.R.S.

Vice-Presidents. Prof. C. E. Tilley, B.Sc., Ph.D., F.R.S.

Lt.-Col. W. Campbell Smith, M.C., T.D., M.A., F.G.S.

Treasurer. F. N. Ashcroft, M.A., F.G.S., F.C.S.

General Secretary. Dr. G. F. Claringbull, B.Sc., Ph.D., F.G.S.

Foreign Secretary. Sir Thomas H. Holland, K.C.S.I., K.C.I.E., D.Sc. LL.D., F.R.S.

Editor of the Journal. Dr. L. J. Spencer, C.B.E., M.A., Sc.D., F.R.S.

Ordinary Members of Council

Dr. A. F. Hallimond, M.A., Sc.D., F.G.S.	Sir Lewis L. Fermor, O.B.E. D.Sc., F.R.S.
B. W. Anderson, B.Sc., F.C.S.	Prof. H. L. Bowman, M.A., D.Sc.
Dr. M. H. Hey, M.A., D.Sc., F.C.S.	F.G.S.
Dr. G. F. Herbert Smith, M.A., D.Sc., F.R.A.S.	Dr. H. F. Harwood, M.Sc., Ph.D. F.I.C.
Prof. C. G. Cullis, D.Sc., M.I.M.M., F.G.S.	G. E. Howling, B.Sc.
Dr. F. C. Phillips, M.A., Ph.D., F.G.S.	Dr. W. F. P. McLintock, D.Sc. F.R.S.E., F.G.S.
	Dr. J. Phemister, M.A., D.Sc. F.R.S.E., F.G.S.

The President thanked the retiring General Secretary for his service and welcomed Dr. Claringbull, his successor. Dr. Malcolm MacGregor proposed a vote of thanks to the retiring Officers and Members of Council. This was seconded by Dr. S. E. Hollingworth and carried unanimously.

The following exhibits were briefly explained:—

1. Specimens of rhodochrosite from Capillitas mine, Catamarca province, Argentina, collected by Dr. F. Mansfeld (Prof. W. T. Gordon).
2. A concentrate of small crystals of columbite from Bauchi plateau, Northern Nigeria (Bisichi Tin Company).
3. Slices of the Kumerina and Wonyulgurna meteoritic irons from Western Australia, presented to the British Museum by Dr. E. S. Simpson (Department of Mineralogy, British Museum).
4. A magnificent polished slab of rhodonite from Pencrebar, Callington, Cornwall; and a large crystal of ilmenite in schist from Craig Dhounne, Glen Effock, Forfarshire (Mr. Arthur Russell).

Model of cahnite, an example of the tetragonal bisphenoidal class (Austin F. Rogers).

Following papers were then read and discussed:—

An example of α -quartz showing good cleavages parallel to the three faces: by Dr. J. Drugman (p. 259).

An example of α -quartz crystals with a steep rhombohedron as prevalent form: by Dr. J. Drugman (p. 261).

The relation of stellerite and epidesmine to stilbite: by Prof. A. (p. 271).

The adinoles of Dinas Head, Cornwall: by Mr. S. O. Agrell.

On three australites of unusual form: by Mr. F. A. Singleton.

Merosymmetry versus merohedrism: by Prof. Austin F. Rogers (p. 281).

Zoned olivines and their petrogenetic significance: by Mr. S. I. (p. 229).

The crystallography of sartorite: by Mr. F. A. Bannister, Prof. A. (p. 264).

MINERALOGICAL

ABSTRACT OF RECEIPTS AND PAYMENTS

		GENERAL PUR	
RECEIPTS		£ s. d.	£ s. d.
By Balances brought forward from 1937—			
1. At Bankers:			
(a) Current Account	25 7 5		
(b) Deposit Account	65 0 0		
2. In Post Office Savings Bank	152 16 3		
3. In Office	0 12 4		
			243 16
Entrance Fees			25 4
Annual Subscriptions—			
1. Current Year	212 18 3		
2. Arrears	4 4 9		
3. In Advance	10 10 0		
			227 13
Sale of Publications—			
1. By Publishers, April 1, 1937–March 31, 1938. Sales at subscription rate £323 0s. 0d. and other sales £46 15s. 6d., less trade discount and com- mission £96 6s. 2d. and distribution charges £18 13s. 2d.	254 16 2		
2. By Custodian of Stock, 1938. £56 14s. 9d. less trade discount £2 17s. 4d. and clearing office and distribution charges £1 13s. 9d.	52 3 8		
			306 19 1
Advertisement Fees £21 12s. 8d. less commission £4 6s. 6d.			17 6
Interest on Investments including Income Tax recovered—			
1. £690 3½% War Loan 1952 and after, Inscribed Stock	22 8 0		
2. £105 4% Consolidated Loan 1957, Inscribed Stock	4 4 0		
3. £100 4% Funding Loan 1960–90, Inscribed Stock	4 0 0		
4. £201 Metropolitan Water Board 3% 'B' Stock, Inscribed	6 0 6		
			36 12
Deposit Interest—			
1. Bankers	0 13 8		
2. Post Office Savings Bank	6 6 10		
			7 0
Small Receipts			0 1
Transfers from other Accounts—			
From Composition Fees Account, being Interest on Investments			35 14
			£900 7

CIETY

THE YEAR ENDING DECEMBER 31, 1938

S ACCOUNT

PAYMENTS		£	s.	d.	£	s.	d.
Printing and distributing the Mineralogical Magazine							
Nos. 160-163 inclusive (Oxford University Press)—							
Printing		364	19	6			
Illustrations		50	14	3			
Authors' Separate Copies		34	10	9			
Distribution Charges		16	4	6			
					466	9	0
Printing and distributing Notices of Meetings and other							
annual miscellaneous printing							
					18	15	6
Miscellaneous Printing &c. (not annual)—							
Notices re Exchanges for Library		0	7	6			
Notices re visit to the Geological Survey and							
Museum		0	17	6			
Address-list for Printers (typing)		0	16	0			
Offprints of Bye-laws and List of Members.		4	7	0			
					6	8	0
Expenses at Meetings—							
Operator of Lantern		2	2	0			
Porter		1	0	0			
Tea		4	4	6			
					7	6	6
Cost of Stock of Publications, J. Mugford, Annual Fee							
Editor's Honorarium					1	1	0
Postage Boxes for stock of the Mineralogical Magazine					50	0	0
Printing Periodicals retained from Library					7	13	0
Advertisement of the Mineralogical Magazine					9	7	3
Stationery					1	1	0
					2	0	6
Salaries—							
Hon. Secretary		1	1	2			
Editor (not charged)		0	0	0			
Hon. Treasurer (not charged)		0	0	0			
					1	1	2
Postage Charges, cheque-book, and other small items							
					0	13	8
Investment: Purchase of £50 0s. 0d. 3½% War Loan							
1952 and after, Inscribed Stock					49	19	11
Balances December 31, 1938—							
At Bankers on Current Account		19	5	2			
In Post Office Savings Bank		259	3	1			
In Office		0	2	5			
					278	10	8
					£900	7	2

BALANCED and compared with Vouchers and found

correct. GILBERT WILSON } Auditors.
A. F. HALLIMOND }

Brought forward 18, 1939.

F. N. ASHCROFT, Hon. Treasurer.

BALANCE

		DECEMBER		
LIABILITIES		£	s.	d.
To Annual Subscriptions received in advance—				
Received in 1938 for 1939	.			10 10
Sundry Creditors	.			0 0
Excess of Assets over Liabilities				1466 4
				<u>£1476 14</u>

COMPOSITION FEES ACCOUNT

RECEIPTS		£	s.	d.	£	s.
By Composition Fees received as per last Account	.	1181	5	0		
Income Invested in 1937 as per last account	.		0	4 6		
Income on Investments including Income Tax recovered—					1181	9
1. £975 3½% War Loan 1952 and after, Inscribed Stock	.	34	2	6		
2. £26 3% Conversion Loan 1948-53, Inscribed Stock	.		0	15 6		
3. £26 14s. 0d. Metropolitan Water Board 3% 'B' Stock, Inscribed	.		0	16 0		
					35	14
					<u>£1217</u>	<u>3</u>

ET

3

ASSETS	£	s.	d.	£	s.	d.
ances—						
At Bankers on Current Account	19	5	2			
In Post Office Savings Bank	259	3	1			
In Office	0	2	5			
				278	10	8

ry Debtors—

shers (Oxford University Press):

(a) For sales of Publications, April 1-Dec. 31, 1938	109	0	10			
(b) For Advertisement Fees, April 1-Dec. 31, 1938	18	14	7			
				127	15	5

estments at Brokers' Valuation—

£690 3½% War Loan 1952 and after, Inscribed Stock at 98%	676	4	0			
£105 4% Consolidated Loan 1957, Inscribed Stock at 104½% ex div.	110	2	4			
£100 4% Funding Loan 1960-90, Inscribed Stock at 107½%	107	10	0			
£201 Metropolitan Water Board 3% 'B' Stock, Inscribed at 85¼%	171	7	1			
				1065	3	5
ance Fees in Arrear				2	2	0
al Subscriptions in Arrear (£10 14s. 9d.) estimated to realize				3	3	0
				£1476	14	6

—The value of the periodicals retained after the disposal of the Library, the unsold Stock of Publications, and the Securities allocated to the Com-
a Fees Account are not included in the above assets.

ary 18, 1939.

F. N. ASHCROFT, Hon. Treasurer.

ENDING DECEMBER 31, 1938

PAYMENTS	£	s.	d.	£	s.	d.
estments as per last Account—						
£975 3½% War Loan 1952 and after, Inscribed Stock, valued by Brokers at £955 10s. 0d. (98%) at cost	1128	15	0			
£26 3% Conversion Loan 1948-53, Inscribed Stock, valued by Brokers at £25 13s. 2d. (98½%) at cost	26	9	6			
£26 14s. 0d. Metropolitan Water Board 3% 'B' Stock, Inscribed, valued by Brokers at £22 15s. 3d. (85¼%) at cost	26	5	0			
				1181	9	6
ne transferred to General Purposes Account				35	14	0
				£1217	3	6

ained and compared with vouchers and found correct.

GILBERT WILSON }
A. F. HALLIMOND } Auditors.

ary 18, 1939.

F. N. ASHCROFT, Hon. Treasurer.

PROCEEDINGS
OF THE
MINERALOGICAL SOCIETY
(1939)

EXCERPT MINUTES OF COUNCIL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., January 26, 1939, at 4 p.m.*

Dr. L. J. SPENCER, F.R.S., President, in the Chair.

Mr. Hugh John Llewellyn Beadnell, Mr. Thomas Deans, and Mr. Edward Grenfell Thomas were proposed and provisionally elected Ordinary Members of the Society.

The resignations of Dr. B. H. Knight and Mr. A. C. D. Pain were moved and accepted. It was agreed to remove from the list of members the names of Prof. T. Ito and Mr. R. Murray Hughes for non-payment of subscriptions.

The Treasurer presented the audited accounts and balance sheet for 1938, which were approved.

The Editor presented a report and proposed that the Editorial Committee should consist of the President, the Editor, the General Secretary, and Mr. W. Campbell Smith.

The President designate, Dr. L. J. Spencer, and Mr. Arthur Russell were appointed the Society's delegates to the International Geological Congress of 1940.

GENERAL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., January 26, 1939, at 5.30 p.m.*

Dr. L. J. SPENCER, F.R.S., President, in the Chair.

Thirty-six Members and three Visitors were present.

The elections of Messrs. H. J. L. Beadnell, T. Deans, and R. G. Thomas as Ordinary Members of the Society were confirmed.

The following exhibits were briefly explained:—

1. A slide-rule designed to facilitate geological calculations (Dr. A. T. J. Dollar).
2. Native silver from Kongsberg, Norway (Dr. H. F. Harwood).
3. A series of Swiss minerals: apatite from Scantschallas, Val Casaccia; axinite from Val Stgira, Val Cristallina; and prehnite from Muotta Nera, Graubünden (Mr. F. N. Ashcroft).
4. A magnificent cut danburite weighing 138.61 carats (Mr. C. W. Mathews) [M.A. 7-333.]
5. A large crystal of melanterite of recent formation in Mill Close mine, Derbyshire (Prof. W. G. Fearnside).

The following papers were then read:

1. An X-ray examination of some potash-soda-felspars: by Mr. S. H. Chao, Mr. D. L. Smare, and Dr. W. H. Taylor (vol. 25, p. 338).
2. Some minerals from the leucite-rich rocks of the West Kimberley area, Western Australia: by Dr. R. T. Prider (read by Dr. N. F. M. Henry) (vol. 25, p. 373).
3. The composition of francolite: by Dr. E. B. Sandell, Dr. M. H. Hey, and Dr. D. McConnell (vol. 25, p. 395).
4. An eyepiece micro-planimeter: by Mr. H. B. S. Cooke (communicated and read by Dr. F. C. Phillips) (vol. 25, p. 388).
5. A new occurrence of bavenite: by Dr. G. F. Claringbull (vol. 25, p. 495).
6. The Huckitta meteorite, Central Australia: by Dr. C. T. Madigan, with chemical analyses by Dr. A. R. Alderman (read by Dr. L. J. Spencer) (vol. 25, p. 353).
7. Sapphirine crystals from Blinkwater, Transvaal: by Prof. E. D. Mountain (read by Dr. L. J. Spencer) (vol. 25, p. 277).

EXCERPT MINUTES OF COUNCIL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., March 9, 1939, at 4 p.m.*

Dr. L. J. SPENCER, F.R.S., President, in the Chair.

The deaths of Prof. G. Cesàro (Honorary Member) on January 20, and of Prof. Henry Louis (senior Ordinary Member) on February 22 were announced.

Mr. Stuart Olof Agrell, Mr. Norman Holgate, and Dr. George Davenport Osborne, were proposed and provisionally elected Ordinary Members of the Society.

Reports were received from the Treasurer and the Editor.
A letter of resignation as from November 1939 from the Honorary Treasurer to the President was read and reluctantly accepted in view of duties in connexion with the International Geological Congress of 1940.
A letter from the Secretary of the Mineralogical Society of America, stating that fellows and members of that Society had approved the report of the Committee on Nomenclature, was read, and after some discussion it was agreed to postpone further consideration of the matter until the next meeting.
The President reported that assistance had been given to the Royal Society and the Ministry of Labour in connexion with the Central Register of scientific workers.
Questions relating to reprinting out-of-print numbers of the Magazine and to the position of the Oxford Chair of Mineralogy were raised.

GENERAL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., March 9, 1939, at 5.30 p.m.*

Dr. L. J. SPENCER, F.R.S., President, in the Chair.

Forty-nine Members and four Visitors were present.
The elections of Mr. S. O. Agrell, Mr. N. Holgate, and Dr. G. D. Sturges as Ordinary Members of the Society were confirmed.
The following exhibits were briefly explained:—
Dr. William Thomson's and other mineral collections of the 18th century (Dr. R. T. Gunther) [M.A. 7-319].
Minerals from Mina da Panasqueira, Fundão, Beira Baixa, Portugal (Mr. Arthur Russell and Dr. W. R. Jones).
A model showing the morphological relationships in glide-twinning in calcite (Dr. F. C. Phillips).
Sections of pebbles from the Lower Greensand specially prepared for examination with a binocular microscope (Dr. A. K. Wells) (vol. 25, p. 402).
Mendip minerals (Mr. A. W. G. Kingsbury).
The following papers were then read:—
The Wherry mine, Penzance, its history and its mineral products, by Mr. Arthur Russell.
On the presentation of chemical analyses of minerals: by Dr. A. K. Wells (vol. 25, p. 402).

3. A note on kaolinite in some 'eenie' coals: by Dr. G. F. Claringbull.
4. Biographical notices of mineralogists recently deceased (seventh series): by Dr. L. J. Spencer (vol. 25, p. 283).

EXCERPT MINUTES OF COUNCIL MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., June 8, 1939, at 4 p.m.*

Dr. L. J. SPENCER, F.R.S., President, in the Chair.

Dr. Robert Crispin Evans and Prof. Adolf Pabst were proposed and provisionally elected Ordinary Members of the Society.

Reports were received from the Treasurer and the Editor. The question of an increase in the number of copies of the Magazine printed was considered, and it was decided not to make any change until the commencement of the next volume. The Treasurer reported on the probable cost of reprinting out-of-print early numbers of the Magazine and of the difficulty in doing this. It was decided that the cost would be prohibitive and the proposal was abandoned.

The joint report of the Committees on Nomenclature of the British and American Societies was further considered, and after considerable discussion the report was agreed to, with certain reservations, and a rider added to the effect that unanimity could not be reached as to certain spellings.

The following dates for meetings in 1940 were approved: Thursdays, January 25, March 7, June 6, and November 7.

The list of Officers and Council for 1939-40 was considered. The following were due to retire: President, Dr. L. J. Spencer; Treasurer, Mr. F. N. Ashcroft; Ordinary Members of Council, Mr. B. W. Anderson, Dr. A. F. Hallimond, Dr. M. H. Hey, and Dr. G. F. Herbert Smith. [Prof. C. G. Cullis tendered his resignation at a later date.] The following were proposed for submission to the Society: as President, Mr. Arthur Russell; as Treasurer, Dr. Malcolm MacGregor; as Ordinary Members of Council, Mr. F. A. Bannister, Dr. S. R. Nockolds, Prof. Harold Simpson, and Mr. S. I. Tomkeieff.

In connexion with suggested changes in the Chair of Mineralogy at Oxford University it was agreed to send a letter to the Vice-Chancellor in support of the claims of mineralogy.

GENERAL MEETING

*held in the Apartments of the Geological Society, Burlington House,
London, W., June 8, 1939, at 5.30 p.m.*

Dr. L. J. SPENCER, F.R.S., President, in the Chair.

Sixty-four Members and seven Visitors were present.

The elections of Dr. R. C. Evans and Prof. A. Pabst as Ordinary Members of the Society were confirmed.

The following exhibits were briefly explained:—

An electromagnetic separator for mineral powders (Dr. R. C. Evans) (vol. 25, p. 474).

A selection of minerals from the Johnston-Lavis Vesuvian collection (Dr. Malcolm MacGregor).

The following papers were then read:—

New refractometers employing diamond and other minerals: by B. W. Anderson, Mr. C. J. Payne, and Mr. J. Pike.

A new occurrence of kornerupine: by Mr. B. W. Anderson and C. J. Payne.

The 'baddelylite from Alnö'—an error: by Dr. H. von Eckermann and Dr. L. J. Spencer) (vol. 25, p. 413).

Crystal-structure of a natural nickel-iron alloy: by Prof. E. A. Tamm and Mr. B. D. Burns (communicated and read by Dr. L. J. Spencer) (vol. 25, p. 413).

EXCERPT MINUTES OF COUNCIL MEETING

*held in the Apartments of the Geological Society, Burlington House,
London, W., November 9, 1939, at 2.45 p.m.*

Dr. L. J. SPENCER, F.R.S., President, in the Chair.

The following deaths were announced: Mr. H. H. Bemrose, Dr. Alfred C. Tarr, Prof. W. A. Tarr, Dr. E. S. Simpson, Lady (Agnes) Gibbs, William J. Pope, and Mr. H. M. Platnauer (formerly a member of the Society). The resignation of Prof. T. Ogura was received and accepted. Mr. Maurice Archambault, Prof. Tom. F. W. Barth, Dr. Cornelius Gurlbut, Jr., Prof. Alexander W. Pavlow, and Dr. George Tunell were proposed and provisionally elected Ordinary Members of the Society.

Reports were received from the Treasurer and the Editor.

The General Secretary presented the draft annual report of Council, which was approved.

A letter was read from Dr. Malcolm MacGregor stating that owing to the outbreak of war he would not be able, if elected, to carry out the duties of treasurer. In view of Dr. MacGregor's resignation the Council co-opted Mr. F. N. Ashcroft, who very kindly agreed to continue to serve in that capacity now that the International Geological Congress of 1940 had been postponed.

Dr. H. F. Harwood and Mr. C. F. Davidson were appointed auditors of the Society's accounts.

It was agreed that session cards should be printed as usual, giving dates but omitting the times of meetings. The times of the meeting on January 25, 1940, were fixed at 2 p.m. for the Council meeting and 3 p.m. for the General meeting.

GENERAL (ANNIVERSARY) MEETING

*Held in the Apartments of the Geological Society, Burlington House,
London, W., November 9, 1939, at 3.30 p.m.*

Dr. L. J. SPENCER, F.R.S., President, in the Chair.

Eighteen Members and three Visitors were present.

Dr. M. H. Hey and Mr. A. W. G. Kingsbury were appointed as scrutineers of the voting papers for the election of Officers and Council.

The elections of Mr. M. Archambault, Prof. T. F. W. Barth, Dr. C. S. Hurlbut, Jr., Prof. A. W. Pavlow, and Dr. G. Tunell as Ordinary Members of the Society were confirmed.

The General Secretary then read the following:

ANNUAL REPORT OF COUNCIL FOR 1938-1939

During the session 1938-1939, four ordinary meetings have been held at which 17 exhibits have been shown and 23 papers read. The total attendance at the meetings was 146 members and 17 visitors.

The Society has lost by death seven ordinary members, Mr. H. H. Bemrose, Lady (Agnes) Gibbs, Dr. Alfred Harker, Prof. Henry Louis (senior member), Sir William J. Pope, Dr. E. S. Simpson, and Prof. W. A. Tarr; and one honorary member, Prof. G. Cesàro.

Twelve new members have been elected, four members have resigned, and the names of two others have been removed from the list on account of arrears in subscription. The membership on October 31 was 267, including 7 honorary members.

four numbers (163-166) of the Mineralogical Magazine have been issued during the year. These contain 23 papers in 367 pages, with 10 plates, and 716 abstracts occupying 200 pages.

The accounts for the year ending December 31, 1938, showed an excess of assets over liabilities of £1466. 4s. 6d. against £1427. 15s. 3d. on December 31, 1937. These accounts do not include the periodicals retained when the Society's Library was sold, the stock of unsold publications, nor the securities allocated to the Composition Fees Account. The value of the Securities standing in the names of the Trustees on December 31, 1938, was: General Reserve £1065. 3s. 5d., Composition Fees Account £1003. 18s. 5d., against £1059. 13s. 10d. and £1042. 11s. 2d. respectively on December 31, 1937. One composition fee has been received and invested.

As was only to be expected, a considerable fall has taken place in the value of the Society's investments since the beginning of 1939, owing to the deterioration of the political situation and the subsequent outbreak of war. The Society's main investments are in $3\frac{1}{2}$ per cent. War Loan, which was quoted at 98 per cent. on December 31, 1938, and at $91\frac{3}{4}$ per cent. on November 8, 1939, and the value of its other securities has also fallen. The receipts from the Society's publishers for sales of the Mineralogical Magazine for the period April 1, 1938—March 31, 1939, at £8. 10s. 4d., were satisfactory, and but few annual subscriptions are still outstanding, the amount due to the Society in respect of subscriptions for the current year and previous years being less than £20. The cash at Bankers, in the Post Office Savings Bank, and in hand at the present time amounts to £455. 2s. 6d. Interest on other receipts during the remainder of the current year are expected to bring about £35 and the expenditure during the remainder of the year is estimated at about £170.

The adoption of the Annual Report, proposed by Dr. G. F. Herbert Smith and seconded by Mr. H. J. L. Beadnell, was carried unanimously.

A vote of thanks to the Geological Society for the use of its rooms was proposed by Dr. A. J. Bull, seconded by Dr. G. Nagelschmidt, and carried with acclamation.

The scrutineers reported that 22 voting papers for the Officers and Council for the ensuing session had been received and that the list nominated by the Council had been approved. The outgoing President declared the following elected:

President. Mr. Arthur Russell, M.B.E.

Vice-Presidents. Prof. C. E. Tilley, B.Sc., Ph.D., F.R.S.

Lt.-Col. W. Campbell Smith, M.C., T.D., M.A., Sc.D.,
F.G.S.

Treasurer. Dr. Malcolm MacGregor, Ph.D., M.Sc., D.I.C., F.G.S.

General Secretary. Dr. G. F. Claringbull, B.Sc., Ph.D., F.G.S.

Foreign Secretary. Sir Thomas H. Holland, K.C.S.I., K.C.I.E., D.Sc.,
L.D., F.R.S.

Editor of the Journal. Dr. L. J. Spencer, C.B.E., M.A., Sc.D., F.R.S.

[continued on p. lxxviii]

MINERALOGICAL

ABSTRACT OF RECEIPTS AND PAYMENTS

GENERAL PUR-

RECEIPTS

	£	s.	d.	£	s.	d.
By Balances brought in from 1938—						
1. At Bankers:						
(a) Current Account	19	5	2			
(b) Deposit Account	0	0	0			
2. In Post Office Savings Bank	259	3	1			
3. In Office	0	2	5			
					278	10 8
Entrance Fees					10	10 0
Annual Subscriptions—						
1. Current Year	210	12	5			
2. Arrears	1	5	9			
3. In Advance	1	1	0			
					212	19 2
Sale of Publications—						
1. By Publishers, April 1, 1938—March 31, 1939. Sales at subscription rate £299. 0s. 0d. and other sales £61. 18s. 0d., less trade discount and com- mission £95. 7s. 8d. and distribution charges £17. 0s. 0d.	248	10	4			
2. By Custodian of Stock, 1939, £3. 0s. 0d. less distribution charges 16s. 9d. and cost of back numbers purchased 3s. 9d.	1	19	6			
					250	9 10
Advertisement Fees £30. 4s. 10d. less commission £6. 1s. 0d.					24	3 10
Interest on Investments including Income Tax re- covered—						
1. £693 3½% War Loan, 1952 and after, Inscribed Stock	24	4	1			
2. £105 4% Consolidated Loan 1957, Inscribed Stock	4	4	0			
3. £100 4% Funding Loan, 1960-90, Inscribed Stock	4	0	0			
4. £201 Metropolitan Water Board 3% 'B' Stock Inscribed	6	0	6			
					38	8 7
Deposit Interest—						
1. Bankers	0	10	7			
2. Post Office Savings Bank	8	19	11			
					9	10 6
Small receipts					0	2 8
Transfers from other Accounts—						
From Composition Fees Account, being Interest on Investments					36	4 5
					£860	19 8

CIETY

R THE YEAR ENDING DECEMBER 30, 1939

ES ACCOUNT

PAYMENTS		£	s.	d.	£	s.	d.
Printing and distributing the Mineralogical Magazine Nos. 164-167 inclusive (Oxford University Press)—							
1. Printing	.	.	.	.	359	16	6
2. Illustrations	.	.	.	.	47	12	9
3. Authors' Separate Copies	.	.	.	.	34	6	6
4. Distribution Charges	.	.	.	.	15	2	0
5. Postal Wrappers (renewal of Stock)	.	.	.	.	2	5	0
						459	2 9
Printing and distributing Notices of Meetings and other annual miscellaneous printing							
	.	.	.	.		14	15 0
Miscellaneous Printing &c. (not annual)—							
Treasurer's notices	.	.	.	.		1	0 0
Expenses at Meetings—							
1. Operator of Lantern	.	.	.	.	2	2	0
2. Porter	.	.	.	.	1	0	0
3. Tea	.	.	.	.	3	8	6
						6	10 6
Care of Stock of Publications, J. Mugford, Annual Fee							
	.	.	.	.		1	1 0
Editor's Honorarium							
	.	.	.	.		50	0 0
Stationery							
	.	.	.	.		2	6 6
Stage—							
1. Hon. Secretary	.	.	.	.	1	0	10
2. Editor (not charged)	.	.	.	.	0	0	0
3. Hon. Treasurer (not charged)	.	.	.	.	0	0	0
						1	0 10
Bank Charges and other small items							
	.	.	.	.		0	9 6
Investments: Purchase of £3 3½% War Loan, 1952 and after, Inscribed Stock							
	.	.	.	.		3	0 0
Balances December 30, 1939—							
1. At Bankers:							
(a) Current Account	.	.	.	.	10	9	9
(b) Deposit Account	.	.	.	.	20	0	0
2. In Post Office Savings Bank	.	.	.	.	288	19	11
3. In Office	.	.	.	.	2	3	11
						321	13 7

£860 19 8

mined and compared with Vouchers and found correct.

HENRY F. HARWOOD } Auditors.
C. F. DAVIDSON }

uary 19, 1940.

F. N. ASHCROFT, Hon. Treasurer.

BALANCE

	LIABILITIES				DECEMBER		
		£	s.	d.	£	s.	d.
To Annual Subscriptions received in advance—							
Received in 1939 for 1940					1	1	0
Sundry Creditors					0	0	0

Excess of Assets over Liabilities	1452	9	1
	<u>£1453</u>	<u>10</u>	<u>1</u>

COMPOSITION FEES ACCOUNT

RECEIPTS

	£	s.	d.	£	s.	d.
Composition Fees received and Income invested in 1937						
as per last account	1181	9	6			
Composition Fee received during year	15	15	0			
				<u>1197</u>	<u>4</u>	<u>6</u>
Income on Investments including Income Tax recovered—						
1. £992 3½% War Loan 1952 and after, Inscribed Stock	34	8	5			
2. £26 3% Conversion Loan 1948-53, Inscribed Stock	0	15	6			
3. £26. 14s. 0d. Metropolitan Water Board 3% 'B' Stock, Inscribed	0	16	0			
				<u>35</u>	<u>19</u>	<u>11</u>

 £1233 4 5

EET

1939	ASSETS	£	s.	d.	£	s.	d.
Balances—							
1. At Bankers:							
(a) Current Account		10	9	9			
(b) Deposit Account		20	0	0			
2. In Post Office Savings Bank		288	19	11			
3. In Office		2	3	11			
undry Debtors—					321	13	7
1. Publishers (Oxford University Press):							
(a) For Sale of Publications, April 1–December 30, 1939		57	15	8			
(b) For Advertisement Fees, April 1–December 30, 1939		14	15	6			
(c) Overpayment in respect of No. 167 of the Mineralogical Magazine		0	2	3			
2. For Sales by Custodian of Stock		20	0	0			
Investments at Brokers' Valuation—					92	13	5
1. £693 3½% War Loan 1952 and after, Inscribed Stock at 93½%		647	19	1			
2. £105 4% Consolidated Loan 1957, Inscribed Stock at 103¼%		108	8	3			
3. £100 4% Funding Loan 1960–90, Inscribed Stock at 106½%		106	17	6			
4. £201 Metropolitan Water Board 3% 'B' Stock, Inscribed at 81¼%		163	6	3			
					1026	11	1
Entrance Fees in Arrear					5	5	0
Annual Subscriptions in Arrear (£17. 4s. 7d.) estimated to realize					7	7	0
					£1453	10	1

te.—The value of the periodicals retained after the disposal of the Library, of the unsold Stock of Publications, and the Securities allocated to the Commission Fees Account are not included in the above assets.

bruary 7, 1940.

F. N. ASHCROFT, Hon. Treasurer.

AR ENDING DECEMBER 30, 1939

	PAYMENTS	£	s.	d.	£	s.	d.
Investments as per last account—							
1. £975 3½% War Loan 1952 and after, Inscribed Stock, valued by Brokers at £911 12s. 6d. (93½%) at cost		1128	15	0			
2. £26 3% Conversion Loan 1948–53, Inscribed Stock, valued by Brokers at £25 8s. 4d. (97¾%) at cost		26	9	6			
3. £26. 14s. 0d. Metropolitan Water Board 3% 'B' Stock, Inscribed, valued by Brokers at £21. 13s. 11d. (81¼%) at cost		26	5	0			
					1181	9	6
Investment made during the year, being Composition Fee received less income invested in 1937. Purchase of £17. 0s. 0d. 3½% War Loan 1952 and after, Inscribed Stock, valued by Brokers at £15. 17s. 11d. (93½%) at cost					15	10	6
Income transferred to General Purposes Account					36	4	5
					£1233	4	5

Examined and compared with Vouchers and found correct.

HENRY F. HARWOOD } Auditors.
C. F. DAVIDSON }

January 19, 1940.

F. N. ASHCROFT, Hon. Treasurer.

Ordinary Members of Council

Dr. G. F. Herbert Smith, M.A., D.Sc., F.R.A.S.	G. E. Howling, B.Sc.
Dr. F. C. Phillips, M.A., Ph.D., F.G.S.	Dr. W. F. P. McLintock, D.Sc., F.R.S.E., F.G.S.
Sir Lewis L. Fermor, O.B.E., D.Sc., F.R.S.	Dr. J. Phemister, M.A., D.Sc., F.R.S.E., F.G.S.
Prof. H. L. Bowman, M.A., D.Sc., F.G.S.	F. A. Bannister, M.A.
Dr. H. F. Harwood, M.Sc., Ph.D., F.I.C.	Dr. S. R. Nockolds, B.Sc., Ph.D., F.G.S.
	Prof. Harold Simpson, M.A., D.Sc.
	S. I. Tomkeieff, M.Sc., F.G.S.

The Secretary read a letter of resignation from Dr. Malcolm MacGregor, and the President announced that the Council had co-opted Mr. F. N. Ashcroft to act as Treasurer.

The retiring President in a few words appreciative of Mr. Arthur Russell's work welcomed him to the chair. Mr. Russell, after thanking the Members for the honour done to him by his election to the Presidency, proposed a vote of thanks to the retiring President. This was seconded by Sir Lewis Fermor and carried.

The new President exhibited specimens of garnet, wollastonite, kyanite, zircon, and magnetite which he had recently collected in Co. Donegal.

The following papers were then read:—

1. Crystallography of aramayoite: by Dr. Harry Berman and Mr. C. W. Wolfe (read by Dr. K. Lonsdale) (vol. 25, p. 466).
2. Tektites and silica-glass: by Dr. L. J. Spencer (vol. 25, p. 425).
3. Some australite structures and their origin: by Mr. George Baker (communicated by Dr. F. L. Stillwell and read by Dr. L. J. Spencer) (vol. 25, p. 487).
4. The Boxhole meteoritic iron, Central Australia: by Dr. C. T. Madigan, with chemical analysis by Dr. A. R. Alderman (read by Dr. L. J. Spencer) (vol. 25, p. 481).